

# CALIFORNIA AND WESTERN MEDICINE

OFFICIAL JOURNAL OF THE CALIFORNIA MEDICAL ASSOCIATION

VOL. 50

MAY, 1939

NO. 5

## SALUTATION FROM WILLIAM W. ROBLEE OF RIVERSIDE PRESIDENT OF THE CALIFORNIA MEDICAL ASSOCIATION

To Members of the California Medical Association—

### *Greetings:*

It is my happy privilege to extend to you a cordial invitation to attend another annual meeting of your California Medical Association, which will be held May 1 to 4.

This year we return to Del Monte, which choice, we know from past experience, will be a happy one. The hospitality extended by the hotel heretofore has been most cordial; the opportunities for out-of-door sports during the recreation periods are ample, and the provision made for the section meetings is satisfactory. Old friendships will be renewed, new ones acquired, and the social functions are always happy occasions.

Medicine is not static, both its science and art being constantly improved. The doctor of medicine and surgery who fails to take cognizance of new developments soon fails to render the type of service to which his patients are entitled. The papers and discussions arranged by the committee in charge are designed to bring to us, in an authentic and thorough manner, the latest developments of medical science. I urge your attendance at as many sessions as possible.

Consideration will also be given, at the first general session and at the meetings of the House of Delegates, to the present status of our medical economic problems.

There never has been a time in the history of the Association when loyalty to our national, state and county organizations was more necessary. I ask your continued interest and support, in order that those to whom you have intrusted leadership may feel that they are backed by a united profession. A good attendance at the Del Monte meeting will give them that assurance.

Cordially,

W. W. ROBLEE.

# California and Western Medicine

Owned and Published by the

CALIFORNIA MEDICAL ASSOCIATION

Four Fifty Sutter, Room 2004, San Francisco, Phone DOuglas 0062

Address editorial, business and advertising communications to Dr. George H. Kress as per address above.

EDITOR . . . . . GEORGE H. KRESS

*Advertisements.*—The Journal is published on the seventh of the month. Advertising copy must be received not later than the fifteenth of the month preceding issue. Advertising rates will be sent on request.

BUSINESS MANAGER . . . . . GEORGE H. KRESS

Advertising Representative for Northern California

L. J. FLYNN, 544 Market Street, San Francisco (DOuglas 0577)

Copyright, 1939, by the California Medical Association

Subscription prices, \$5 (\$6 for foreign countries); single copies, 50 cents.

Volumes begin with the first of January and the first of July. Subscriptions may commence at any time.

*Change of Address.*—Request for change of address should give both the old and the new address. No change in any address on the mailing list will be made until such change is requested by county secretaries or by the member concerned.

*Responsibility for Statements and Conclusions in Original Articles.*—Authors are responsible for all statements, conclusions and methods of presenting their subjects. These may or may not be in harmony with the views of the editorial staff. It is aimed to permit authors to have as wide latitude as the general policy of the Journal and the demands on its space may permit. The right to reduce or reject any article is always reserved.

*Contributions—Exclusive Publication.*—Articles are accepted for publication on condition that they are contributed solely to this Journal. New copy must be sent to the editorial office not later than the fifteenth day of the month preceding the date of publication.

*Contributions—Length of Articles; Extra Costs.*—Original articles should not exceed three and one-half pages in length. Authors who wish articles of greater length printed must pay extra costs involved. Illustrations in excess of amount allowed by the Council are also extra.

*Leaflet Regarding Rules of Publication.*—CALIFORNIA AND WESTERN MEDICINE has prepared a leaflet explaining its rules regarding publication. This leaflet gives suggestions on the preparation of manuscripts and of illustrations. It is suggested that contributors to this Journal write to its office requesting a copy of this leaflet.

## DEPARTMENT INDEX

(Itemized Index of Articles is printed on Front Cover)

	PAGE
Editorials . . . . .	322
Editorial Comment . . . . .	326
Original Articles . . . . .	329
Lure of Medical History . . . . .	355
Clinical Notes and Case Reports . . . . .	358
Bedside Medicine . . . . .	364
California Medical Association . . . . .	367
C. M. A. Department of Public Relations . . . . .	367
Woman's Auxiliary to C. M. A. . . . .	375
News . . . . .	378
Letters . . . . .	384
Special Articles . . . . .	387
Twenty-five Years Ago; State Examining Board . . . . .	392
Index to Advertisements . . . . .	Adv. p. 8

# EDITORIALS†

## DEL MONTE ANNUAL SESSION: NEWLY-ELECTED OFFICERS

**Official Journal in Press During the Annual Session.**—CALIFORNIA AND WESTERN MEDICINE's May issue will be in press during the time of the California Medical Association's sixty-eighth annual session at Del Monte, May 1-4. Therefore, in the present number, it will not be possible to give detailed information concerning the proceedings, and a recital of happenings must lie over until June.

Space for the names of newly-elected general officers, however, having been reserved on the last form to go to press, the list received by telegraph from Del Monte may be given.

\* \* \*

**Newly-Elected Officers.\***—The newly-elected officers include the following:

President-Elect, Harry H. Wilson, Los Angeles.  
Speaker, Lowell S. Goin, Los Angeles.

Vice-Speaker, Dewey R. Powell, Stockton.

Councilors: Second District, George D. Maner, Los Angeles; Fifth District, C. Kelly Canelo, San Jose; Eighth District, Frank MacDonald, Sacramento.

Councilors-at-Large: C. O. Tanner, San Diego; J. Elbridge Best, San Francisco; Frederick N. Scatena, Sacramento.

Delegates to the American Medical Association: J. Elbridge Best, San Francisco; Lyell C. Kinney, San Diego; Lowell S. Goin, Los Angeles.

Alternates to the American Medical Association: Robert S. Stone, San Francisco; Bon O. Adams, Riverside; Roy E. Thomas, Los Angeles.

The Hotel Del Coronado at Coronado was announced as the meeting place for the 1940 annual session.

\* \* \*

**Service Rendered by Retiring President William W. Roblee and the Incoming President, Charles A. Dukes.**—A few words, therefore, about William W. Roblee of Riverside, now past president, and Charles A. Dukes of Oakland, now president, may not be amiss.

As has been stated in the past, positions of responsibility in so large a constituent state medical association as that of California (the fourth largest state unit in the American Medical Association, and perhaps, next year, the third largest) are no longer to be rated as sinecures. Be it said to the credit of the retiring president, William W. Roblee, and to his successor, President Charles A. Dukes

† Editorials on subjects of scientific and clinical interest, contributed by members of the California Medical Association, are printed in the Editorial Comment column which follows.

\* At the annual organization meeting of the Council, held at Del Monte on Thursday, May 4, 1939, the following officers were elected: Chairman, Dr. Karl Schaupp, San Francisco; Vice-Chairman, Dr. Charles A. Dukes, Oakland. Dr. Earl Moody, Los Angeles, was elected Councilor to fill the unexpired term of Dr. Harry H. Wilson, Los Angeles, incoming President-Elect. Dr. George H. Kress, San Francisco, was elected Secretary-Treasurer-Editor.

(both, by the way, members of the Stanford-Cooper Medical College class of 1895), that neither of these colleagues has failed to meet each and every call made upon him. More than that, to Doctor Roblee, through a tour to component county medical societies in the northern sections of California, and to Doctor Dukes, for a series of visits to county units in the southern section of the State, much credit must be given in laying the foundation for a more unanimous reaction to the medical service plans on periodic payment basis, as promulgated by the California Medical Association, that have found concrete expression in the separate organization, now known from one end of the State to the other as "California Physicians' Service."

So, also, in many other activities concerning which they have been consulted, Doctors Roblee and Dukes have at all times been ready to give willing and efficient service.

In bidding adieu, then, to Doctor Roblee, as he lays aside the extra responsibilities of the presidential office, the Association at the same time extends its welcome to incoming President Charles A. Dukes as he assumes the obligations of his new field of work. His past record, in many lines of altruistic service in medical practice and organization, is of so creditable a nature that all members of the California Medical Association may feel sure that the interests of the profession will be most punctiliously safeguarded.

\* \* \*

**California Medical Association Welcomes All Newly-Elected Officers.**—And now, some words of welcome to the new president-elect, whose name, at the time of this writing, we of course do not know. Whosoever may be selected by the House of Delegates at Del Monte on May 3, 1939, likewise has the good will of all members of the Association. The problems immediately before us, while the Legislature is in session, will probably continue as problems, to be met at the next legislative session. The president-elect, therefore, will need to be actively alert, not only in 1941, but prior thereto, in order that no major political situations of a surprise nature be thrust upon the already overtaxed profession.

That the newly-chosen president-elect and counselors will join with other colleagues in official positions to meet courageously and in an alert manner all issues having to do with medical practice and public health standards we cannot doubt.

To each and all such administrators the OFFICIAL JOURNAL, on behalf of the members of the California Medical Association, pledges loyal and generous service, and tenders its best wishes for most successful terms of office.

#### GOVERNMENTAL HEALTH INSURANCE PROPAGANDA

**Emotionalism Not Conducive to Clear Thinking.**—Strange as it may seem, it is nevertheless a fact that, under the influence of emotional partisanship, persons otherwise looked upon as

honest are not infrequently guilty of making misstatements in support of causes they espouse that are far removed from the real truth. An example of this weakness in human nature has been repeatedly manifested in the speeches of certain proponents of compulsory health legislation, as they have recently appeared before the public in California, in promotion of the Assembly and Senate bills (A. B. 2172 and its companion measure, S. B. 1128) now pending for consideration before the State Legislature. These proposed laws, so vociferously urged for adoption by certain specific political and associated interests, if enacted, would inaugurate for one of the largest and wealthiest states of the Union a system of medical care radically different from that which has brought to the United States the lowest morbidity and mortality rates of any comparable land in the civilized world!

The fact that the proposed system has not been tried out in any country where environmental and other conditions are actually similar to those which obtain in California seems unworthy of serious thought or acceptance by most of these sponsors of compulsory health laws, who apparently have concluded that, if certain European nations (classified as in the groups of civilized lands) have compulsory health systems, then the systems in vogue there must necessarily be equally adaptable to America. Such factors as the geographic, economic and social welfare elements, and the homo- or heterogeneity of the population types, as well as the quantity and quality of medical service that has been and is rendered to three-fourths or more of the respective populations, are passed over as of little or no moment!

And yet, if the supposed amount of inadequate medical care does not exist in America—and physicians, who should know, do not believe it to exist as so darkly painted—then there is no reason for revolutionary changes in the method of medical practice, through institution of a governmental health system, in which political supervisors would rule over scientifically trained physicians.

\* \* \*

**Theorists Are Not Always Logical Thinkers.** As one observes the continued activities of the advocates of compulsory health legislation in our State, this defect in logical thinking on the part of many of the theoretical expounders of compulsory health laws—be they in the groups of political, social welfare, or philosophy teachers matters not—becomes increasingly apparent. And nowhere more so than when, in forums or assemblies, or in other public places of announcement or discussion of their cause (under what might be called a spell of auto-hypnosis), they sally forth in gratulatory enunciation of their points of view. If the issues at stake were not of such vital relationship to the health of the people, and to the system of American government as handed down by the country's founders, as well as to the economic background, and therefore to the social welfare of the citizenry of California, the entire matter could be passed over as just "one of those things."

**Vicious Features of A. B. 2172 and S. B. 1128.** It may be stated that A. B. 2172 and S. B. 1128 are proposed statutes which, if they became laws,

1. Would *not* bring better medical care to the people of California;

2. Would inflict upon the economic interests of the State, in all their expressions, an overload of taxation, creating bankruptcy for many now self-sustaining firms, with loss of employment, and the sad supplements of lowered welfare standards and poverty, with resulting illness, for thousands upon thousands of wage earners; and

3. Would destroy, yes, one might say, debauch, the system of medical practice that has been and is now in existence, in which, both from within and from without, necessary changes in methods are constantly made, in harmony with changing times and needs.

\* \* \*

**Physicians Are Practically a Unit Against Compulsory Health Systems.**—With such possible end-results, it is not to be wondered at that, by and large, the great majority of physicians are unalterably opposed to compulsory health legislation, as expressed in A. B. 2172 and S. B. 1128, either as originally presented to the California Legislature on January 25, 1939, or in the almost entirely rewritten A. B. 2172, as amended on April 14, 1939. (The long-awaited amendments were finally submitted three days before the public hearing held on April 19 by the Assembly and Senate committees in the crowded Assembly chambers at Sacramento.)

\* \* \*

**Public Hearing on A. B. 2172 at Sacramento: A Practically New Bill.**—In the Sacramento public hearing it was stated that the persons backing the proposed legislation had given long and serious thought to the drafting of A. B. 2172 and S. B. 1128, so that, when submitted to the legislators, a minimum of amendments only would be needed. It became evident, however, soon after the initial presentation of the bills on January 25, that the proposed laws (seen practically up to the date of their submittal only by those who had previously committed themselves to a compulsory health system) contained many defects in the drafts.

This fact was emphasized at the Sacramento hearing when, in exchange of statement and opinion by Mr. Chester Rowell, Chairman of the Governor's Committee of Twenty-one,\* and Assemblyman Ben Rosenthal (who stated he was the author of the bill), with a representative of the Labor Council of San Francisco, it was brought out by the last speaker that the Labor Council had adopted a resolution favoring only health insurance in principle (not A. B. 2172 as submitted on January 25, and certainly not A. B. 2172 as amended from some nine to about thirty pages on April 14). The amended measure, no one, presumably, other than the proponents who were seeking the endorsement of the Assembly committee had had an opportunity to study prior to the

evening of the April 19 hearing.<sup>†</sup> And yet, the proponents hoped to have the Assembly committee bring out a recommendation that it "do pass." Strange inconsistency.

\* \* \*

**Professors Dodd and May.**—Yet it was just such a measure, with an estimated annual income from taxation sources of almost seventy million dollars (the figures are those read by Paul A. Dodd of California Medical Economic Survey fame, and given by him in the April 19 hearing), that the sponsors of the legislation insisted should be adopted!

With this insistence goes an implied threat to the members of the medical profession that if they do not accept the legislation as proposed the matter will be taken to the people for vote! Witness in this connection some excerpts from the talk by Professor Samuel C. May, Director of the Bureau of Public Administration, University of California, as given on page 383 of the official publication of the Commonwealth Club, issue of March 28, 1939, at which time he stated:

... A voluntary plan covers the worst risks rather than the best risks. *But the most important factor is that from 30 to 40 per cent of the American public are not receiving adequate medical service,\** and they are in the income groups which will not join the voluntary plan. . . .

*The bill which is now before the California Legislature has been carefully thought out by people who have been studying this for many years. If it is not adopted by the Legislature, it will go on the ballot and be voted on by the people of California. I have no doubt whatsoever that if it goes on the ballot it will pass by an overwhelming vote. . . .*

So, gentlemen, as a practical problem, you cannot stop compulsory health insurance. The medical profession, instead of continually fighting it—and I am not certain they have stopped that fight—should come into the compulsory plan and see that it is properly formulated and administered, because they are going to get compulsory health insurance, whether they want it or not. . . .

Columnist Rowell, in his dissertation in the *San Francisco Chronicle* of April 25, gives expression to a point of view similar to that of his co-worker, Professor May, when he states:

There is going to be a health insurance law submitted to the people—by referendum, if the Legislature passes the bill; by initiative if it does not. The doctors would do well to cooperate in passing the bill by the Legislature, so that the vote may be by referendum and on it, as it may emerge from the crucible of legislative discussion, rather than risk that the initiative might be submitted by groups less considerate of the doctors, employers and taxpayers than the framers of this bill have been. To use the sort of Latin in which doctors often write prescriptions: "verb. sap. sat."

The above quotations should be of special interest to physicians, not only because Professor

<sup>†</sup> The item below, which appeared in the *San Francisco Chronicle*, April 26, gives later news on the course of A. B. 2172 in the Assembly. The vote of the committee is the same as the forecast thereon, prior to the April 19 Assembly hearing. Item follows:

**Assembly Unit Backs Health Insurance**

Sacramento, April 25 (AP).—The Assembly committee on unemployment tonight sent to the floor with a favorable recommendation the Rosenthal bill proposing a State compulsory health insurance program. The decision was reached at an executive session and the vote was 5 to 2.

Under terms of the bill the program would be financed through joint contributions from employers and employees, with the State also bearing a portion of the expense.

Fred Reaves, San Pedro Democrat, who is chairman of the committee, predicted the bill would be passed by the Assembly.

\* Editor's Note.—Italics our own.

\* For names, and complexion as to interests, see *CALIFORNIA AND WESTERN MEDICINE*, March, 1939, on page 229.

May and Editor Rowell have sat with the inner council of the sponsors of the compulsory legislation, but also owing to the patently erroneous statement by these laymen, both on the rostrum and in print, concerning the large proportion of American citizens whom they and others claim are receiving inadequate medical care.

\* \* \*

**By Contrast, Read a Sane Statement by an International Authority on Public Health.**—By way of contrast to statements made by several of the laymen who were associated with the California Medical Economic Survey, and by others in the proponent group for compulsory health legislation who have recently been making speeches on the subject, and to close these comments, we shall quote from an address, "Signs of the Times in Public Health," by Haven Emerson, M.D., Professor of Public Health Practice of the De Lamar Institute of Public Health of Columbia University, an international and much-beloved authority on public health problems, who has made important surveys at home and abroad,<sup>†</sup> and who said, in a recent New Jersey address:

... That a high quality of care has been given to the sick poor in the past is generally admitted, and is attested by adequate statistical proof of the reduction in morbidity and mortality to their present low levels among such persons.

That some people who need medical attention do not receive it will always be true, as it is today, but the reasons for this are not largely, if at all, due to the inability of these sick to pay for the cost of necessary treatment, but chiefly result from ignorance, superstition, and misinformation growing out of religious beliefs and faith in the promotion of advertised medicaments. *That anything like one-third of the sick now lack medical care† or even that a larger proportion of the population are hindered from gainful employment by preventable and remediable but uncared for disease, as the peroration of the technical committee [lay committee of "technical experts, appointed by President Roosevelt's 'Interdepartmental Committee']" would try to persuade us with statistics and emotional publicity, is just so far from the truth that it will be forgotten by the public and by the physicians of this country who know it is not so. . . .*

... We must expect on the experience of other countries that if government actually operates on any compulsory insurance scheme a considerable amount of the services for the sick for people at low-income levels, the cost of medical care of these people will be largely increased, perhaps doubled by the cost of administration!

We have good reason also to suspect that the quality of care will deteriorate, and that the amount and duration of complaints of illness, and the amount of medicaments used will all markedly increase.

The present cause of lack of well-qualified medical care for those really needing it, and wanting it but not receiving it, is chiefly ignorance of available resources, and it would appear that *such sick persons are included in not more than five per cent and in various samplings less than one-half of one per cent of the total population.*<sup>‡</sup>

It is as much the duty of the medical profession to warn the public against extravagant and utopian schemes of all inclusive commercial or governmental provision of medical care with their inevitable inferiorities as it is to assure a constantly improved standard of personal service to the sick on the basis of private economic and professional relationship! . . .

<sup>†</sup> See "Who's Who in America," 1938-1939, on page 838, for the record of past services of Professor Haven Emerson.

<sup>‡</sup> Editor's Note.—Italics our own.

**Who Are the Proponents and Opponents of Compulsory Health Legislation?**—Is it not permissible to state, as regards compulsory health insurance, that there are two camps?

1. *The Proponents* for such legislation, who are largely lay persons, with little inside or expert knowledge of medical practice and service, who expound theoretical plans supposedly based on the experience of peoples in other lands, but which, if logical and clear thinking be observed, are not applicable to California; and

2. *The Opponents*, the leaders of whom are the practitioners of medicine, to whom America is so greatly indebted for having the lowest morbidity and mortality rates of any civilized country<sup>†</sup> (the compulsory health system countries not excluded), and who, probably up to 90 per cent or more, are opposed to a compulsory health system of medical practice, their opposition being reinforced by public health experts of wide experience and international reputation, such as Haven Emerson of New York. Fortunately, also, allied with this group are the large and small business interests of the United States, through whom much of the prosperity that has made for higher standards of living has been developed.

In conclusion, it may be affirmed that if a health system were to come into existence in California such as is contemplated in the proposed law known as A. B. 2172, the people of California, in every walk of life, would rue and doubly rue the day on which they took the advice of false prophets to sell their birthright for a mess of pottage!

#### AUSTRALIA'S RECENT EXPERIENCE WITH A COMPULSORY HEALTH SYSTEM

**Misstatement Regarding Universal Success of Compulsory Health Insurance.**—Proponents of a governmental compulsory health system for California have emphasized during the last several months, and almost overstressed their statements, that compulsory health systems have been great successes wherever tried. Some brief excerpts, however, from the speech of Mr. Chester Rowell of San Francisco (Chairman of Governor Olson's Committee of Twenty-one on Health Insurance, of which committee Barbara Nachtrieb Armstrong is secretary, he and she also having held similar positions when the abortive attempt was made some two decades ago to use California as the guinea pig for a compulsory health system), may indicate why the statement above is here given. We quote from page 375 of *The Commonwealth* (Vol. XV, No. 13, for March 28, 1939), where Mr. Rowell states:

... Now, all the way from the Chinese coolie up to the highest and most developed civilized nations in the world, health insurance is in operation. . . .

... The rest of the world has abundant experience in applying health insurance to non-occupational diseases—more than fifty years in Germany, a quarter of a century in Britain and other countries. It now covers the civilized world—except for this country. . . .

<sup>†</sup> See in this issue, for example, the record of California for the year 1938, on page 387.

### Australia's Repudiation of Its Recent System.

Because of declarations such as the above, it may not be out of place to call attention to the recent experience of Australia, where propagandists for a compulsory health system were successful in securing the enactment of laws not greatly dissimilar from those now being so assiduously advocated in California by certain well-recognized interests.

Read, by variation, not the supposed laudatory commendation of the peasant class of Germany or the very low income wage-earning group in England, on the beneficent nature of compulsory health systems (as so frequently portrayed by American proponents of such legislation), but what has actually come to light in a recent real experience with compulsory health insurance among the highly progressive, up-to-date and forward-moving Australians!

The tale\* of the events there, as cited below, may be of interest to Editor Rowell and his co-laborers, and not without deep significance to Californians, should their citizenry ever be so unfortunate as to embark upon a similar compulsory enterprise:

#### NATIONAL HEALTH INSURANCE ABANDONED †

The commonwealth government of Australia has now decided to abandon completely its scheme for national health and pensions insurance. In a determined effort to preserve the plan even if only in skeleton form, several alternative schemes less comprehensive in nature were considered, but the agreement to abandon the whole insurance act was reached today with only two members dissenting. The treasurer (Mr. R. G. Casey), who evolved the scheme and fathered it through Parliament, has now emerged as one of the strongest advocates against it. Reasons advanced for this decision are fear that the financial burden involved may be so great as to stifle the normal developmental expenditure if it is allowed to fall simultaneously with the heavy defense program to which the ministry is already committed, fear of the repercussions from the cost of insurance while the greater part of the commonwealth is suffering from the effects of severe drought and widespread bush fires, and a recognition of the fact that throughout Australia the act is highly unpopular and that its introduction against the wishes of the people may lead, ultimately, to grave political consequences.

The opposition to the scheme in the ministry itself, although strong when Parliament adjourned in December, has increased immensely since. In the past two months, members of the cabinet have moved freely in their electorates and have in many cases been astonished at the intensity of public feeling against national insurance.

The abandonment of the scheme will cost the commonwealth government at least 750,000 pounds and perhaps 1,000,000 pounds, according to estimates made by the National Insurance Commission. Large sums of money have been spent on the initial steps for its establishment, and numerous "approved societies" have incurred heavy expenditures to cope with the new responsibilities which they were prepared to undertake. Already 156 such societies have been formed in Australia, sixty by trade-unions, fifty-nine by friendly societies, and thirty-seven by miscellaneous organizations; wages contracts have been entered into with staffs, and many men have left lucrative posts to take administrative positions with the government or with approved societies. The government has not yet considered whether the whole organization which it created will be disbanded immediately or whether it will be kept to form a nucleus for the proposed national register (for defense purposes). The British Medical Association in Australia has been opposed from the start to national insurance as

proposed by the government. It is to be hoped that this abandonment of the present scheme will furnish an opportunity for drawing up at some future date a scheme more universally acceptable, to be put into practice at a time when the nation is better prepared to handle developmental measures.

**Other State Association and Component County Society News.**—Additional news concerning the activities and work of the California Medical Association and its component county medical societies is printed in this issue, commencing on page 367.

## EDITORIAL COMMENT†

### THE PELVIC FLOOR

There is no doubt that the mooted question of what constitutes the most important natural supports has had more different answers, by more different men, than perhaps any other gynecological question. Abundant reason exists for the wide discrepancies in opinion, depending upon the investigator, whether anatomist or gynecologist. For the anatomist there exists the plain evidence of the different normal tissues which make up the pelvic walls, with little or no speculation upon the pathological state. The gynecologist, on the other hand, views first the pathological changes which may occur, whereby the basic support of the pelvic contents are either wanting or greatly insufficient. Having determined the results of these changes, he sets about to effect a restitution of the normal. This is accomplished by operation about the vagina, or entering the abdomen from above.

When we review the anatomy of the pelvic floor, with its related structures, we see why either method of attack may be necessary. We see, also, that what appears at times an incomplete operation, is met with a splendid functional and symptomatic result.

The pelvic floor may be divided into two parts—a superior and an inferior—on account of their anatomical relations. The inferior pelvic floor consists of voluntary muscles, their sheaths or fascia, some areolar tissue, blood vessels, sheaths and nerves. As this is not an anatomical paper, but rather gynecological, the anatomy is but grossly referred to.

The chief muscles of the female perineum are, of course, the levator ani and the coccygeus which, according to anatomies, support and raise the floor of the pelvis. They are chiefly swung between three important points—rami of the pubes, central raphe coccyx, and sacrum behind. These muscles lie between an important fascia which forms their sheath, and which is derived from the obturator and recto-fascia. The obturator fascia covers the inner sur-

\* From the *Journal A. M. A.*, April 8, 1939, on page 1402.

† From our regular correspondent: February 14, 1939.

† This department of CALIFORNIA AND WESTERN MEDICINE presents editorial comments by contributing members on items of medical progress, science and practice, and on topics from recent medical books or journals. An invitation is extended to all members of the California Medical Association to submit brief editorial discussions suitable for publication in this department. No presentation should be over five hundred words in length.

face of the obturator internus muscle; it is attached to the iliac portion of the iliopectineal line, to the body of the pubis, and to the great sacrosacral ligament and notch. Below it joins the falciform process of the great sacrosacral ligament, and binds the ischioanal fossa externally. Near its upper margin it gives off the anal fascia, which covers the levator ani and binds the ischioanal fossa internally. The fascia of the pyriformis is continued back from the obturator muscle. The rectovesical fascia is attached in front to the back of the pubis, and is laterally separated from the obturator fascia. This fascia, covering the upper surface of the levator ani muscle, passes to the upper surface of the vagina to form the front of the sheath of the rectum. In front it is continued to the upper layer of the triangular ligament. Thus, this fascia forms the staunch support of the ligaments of the bladder and rectum.

When one compares these relatively poorly developed muscles with those of the rest of the body, which must bear constant stress of tension and work, it becomes evident from the ever present pressure from above that the muscles, themselves, were scarcely intended, even in a slight way, to represent support. They have always appeared to serve some local function of the vagina and rectum, though in no sense as an important muscular support. The interposition of the vagina nullifies any intention of these muscles as supports. This slit offers abundant room for the uterus, as a wedge, whenever that organ, with bladder and rectum, begins to prolapse.

In spite of the above, almost every authority stresses upon uniting the torn edges of the levator muscles in repairing the perineal floor. Yet, when this is done, only a few torn strands of muscle are found, surrounded by well-developed fascia.

It is evident that the inadequate strands of muscle fibers cannot act as supports, while the strong fascia in this region can; hence, the importance should be placed where it belongs, namely, upon the fascia. The muscle itself affords movement, resiliency, and adaptability. For example, could we assume that the well-developed recti, back muscles, neck and thigh muscles, act as efficient supports without their strong sheaths. Notwithstanding these facts, almost every authority and textbook abound with the importance and significance of this poor, frazzled and torn levator muscle, and no emphasis is laid upon the torn fascia. The important thing is, as we have come to learn from our own cases, that the perineal fascia is the structure of paramount importance, and the approximation of its torn edges is the operation of necessity.

Now, in view of the above facts, we know that uteri prolapsus is due to weakness in the pelvic floor, and insufficiency of intrapelvic and uterine supports. A tight, well-closed vaginal outlet is the most important factor in retaining the uterus within the pelvis.

350 Post Street.

ABRAHAM BERNSTEIN,  
San Francisco.

#### SKIN TEST FOR ALCOHOL TOLERANCE

That individual susceptibility to ingested alcohol can be titrated by the endermic injection of ethyl alcohol was recently claimed by Dr. John M. Nagle<sup>1</sup> of the Psychiatric Clinic, Agnews State Hospital, California, in a paper, presented by invitation, before the San Francisco meeting of the Association for the Study of Allergy. If the reliability of the Nagle skin test is confirmed by other investigators, the test would be a valuable addition to the practical clinical technique, and might lead to new and more effective methods of therapy and control of alcoholism.

That there are wide differences in the susceptibility of different individuals to ethyl alcohol is now generally recognized. Recent studies by the Psychotechnic Institute,<sup>2</sup> Dresden, Germany, for example, show that 20 per cent of all normal individuals are rendered psychologically incapable of safe automobile driving as soon as the alcohol content of the blood stream is increased to 0.02 per cent. This is an amount equivalent to the alcohol content of one small bottle of beer, assuming that the beverage is completely absorbed from the gastro-intestinal tract. At the other end of their susceptibility scale, the Dresden investigators claim that 10 per cent of all individuals remain perfectly sober, even after the alcohol content of the blood stream is increased to six times this amount.

If the complex psychological tests used by the Dresden investigators can be replaced by a simple skin test, as Doctor Nagle affirms, a feasible scientific diagnosis of alcoholic intoxication will be made possible. Methods now official in certain European countries are unscientific. In Sweden, for example, a man is legally intoxicated as soon as the alcohol content of the blood stream reaches 0.05 per cent, irrespective of the individual coefficient of tolerance. Accepting the percentages reported by the Dresden psychologists, less than half of the individuals are demonstrably intoxicated at this concentration.

In Doctor Nagle's endermic titration, 0.03 cubic centimeters, 60 per cent ethyl alcohol is injected intracutaneously in the deltoid region of the left arm, with a control injection of the same volume of physiological salt solution in the right arm. Almost immediately wheal formation is noted. Since this wheal is fairly constant in size and intensity in all individuals, it is of no diagnostic significance. Surrounding this wheal, however, an inflammatory reaction of varying size and intensity soon develops, reaching its maximum in about thirty minutes. In alcohol allergics this peripheral erythema may be three or more inches in diameter, in extreme cases even extending over the entire surface of the upper arm. About 20 per cent of the two hundred cases tested by Doctor Nagle gave reaction of this severity, agreeing quite closely with the 20 per cent alcohol allergics reported by the Dresden investigators. At the other end of Doctor Nagle's scale,

<sup>1</sup> Nagle, John M., paper read before the Association for the Study of Allergy, San Francisco, June 11, 1938 (to be published).

<sup>2</sup> Foreign Letters (Berlin), J. A. M. A., 110: 1617 (May 7), 1938.

approximately 10 per cent of his tested individuals gave no peripheral inflammatory reaction whatsoever, agreeing quite closely with the 10 per cent alcohol-tolerant group of the Dresden psychologists.

Doctor Nagle supported his conclusion that the proposed skin test is a reliable measure of individual tolerance or susceptibility to ingested alcohol by the histories of one hundred committed alcoholics tested during the past eighteen months in Agnews State Hospital. Habitual alcohol consumption by these individuals before court commitment was, in all cases, inversely proportional to skin tolerance. In many alcohol allergics habitual consumption was less than that of the average non-alcoholic social drinker. In one extreme case, for example, alcohol was not suspected as an etiological factor in the commitment "psychosis," till his skin test revealed a four plus hypersusceptibility. In this case the commitment diagnosis was changed to "alcoholic allergy without psychosis." A very interesting confirmation of Doctor Nagle's conclusion was obtained by susceptibility tests on eleven non-alcoholic volunteers. The minimum number of highballs taken on an empty stomach necessary to cause detectable intoxication (speech defects) was determined for each of these individuals. From data thus obtained, Doctor Nagle predicted the severity of the subsequent skin reaction correctly in ten cases.

In the discussion of Doctor Nagle's paper before the Allergic Association, it was pointed out that ten years ago his conclusion would have been accepted without question. At that time the skin reaction was quite generally considered to be both qualitatively and quantitatively diagnostic of the allergic sensitivity of all other tissues and organs of the human body. During the last decade, however, it has been definitely shown that marked cutaneous sensitivity may be, and often is, associated with a nonreacting bronchial musculature, and that high pulmonary sensitivity is occasionally associated with nonallergic skin. At the present time, therefore, most allergists will be skeptical of Doctor Nagle's claims till the reliability of his test is confirmed by more adequate and detailed experimental or clinical evidence. If confirmed, however, Doctor Nagle has made an epoch-making contribution to medico-legal and clinical technique.

P. O. Box 51.

W. H. MANWARING,  
Stanford University.

#### CONTRAINDICATIONS OF MANIPULATION IN ORTHOPEDICS

Manipulation should be used judiciously, for its use in many cases may be definitely harmful. Particularly is this so when there has been a failure of diagnosis of the condition to be treated, or where the diagnosis has been incorrect. The condition called lumbago, for example (which implies simply the existence of back pain), consists, in fact, of a failure of diagnosis. Probably 90 per cent of the cases of so-called sciatica constitute incorrect diagnoses, the reason being that any pain radiating

down the back of the leg is frequently labeled sciatica.

The reasons for this should be clear, but to elucidate: A patient with a diagnosis of lumbago is sent in for treatment. All this means is that the patient has a pain in his back, and that, too frequently, is all the doctor knows about it. Obviously, a pain in the back, or lumbago, may be due to any number of pathologic conditions, such as acute and chronic infectious spondylitis, syphilis, osteochondritis, tuberculosis, spondylolisthesis, or forward slipping of one vertebra on another, the only symptom of which may be back pain. It is probably superfluous to mention fractures of the spine as a contraindication to manipulation, yet certain fractures of transverse processes are frequently missed and, therefore, may be called lumbago.

Many other conditions may be mentioned, but attention will be called only to acute and chronic osteomyelitis, bone tumors, whether primary or metastatic, and finally low-back strain, by which is meant lumbosacral or sacro-iliac strain. This last-mentioned condition is probably that most frequently called lumbago. The reason why manipulation is contraindicated in this condition should be clear when one visualizes what, in fact, is meant by strain. In sacro-iliac strain, for example, the underlying pathology is a rupture or tearing of the sacro-iliac ligaments, or those ligaments which bridge the joint between the ileum and the sacrum, and which constitute its principal support. Coincidental with such rupture or tearing, there is bleeding or hemorrhage from the ends of the torn ligaments and, eventually, organization of the blood-clot and repair by means of infiltration of new connective tissue.

Now, if at any phase of this process a back so affected is manipulated, the reparative process is interrupted, thereby prolonging recovery and adding to the patient's pain. The contraindication to manipulation in the other conditions mentioned is more easily apparent; as, for instance, the dissemination of malignant cells in bone-tumor cases, facilitating metastases, or the production of pathologic fractures, by weakening a spine already structurally weak from disease. In spondylolisthesis, manipulation may increase the deformity, may cause, as in fractures of the spine, pressure on nerve roots or on the cord, as the case may be, resulting in paralyses of varying extents.

As mentioned before, sciatica is frequently an incorrect diagnosis. Sciatica is a synonym for sciatic neuritis, or inflammation of the sciatic nerve. When present, there is, in fact, pain down the back of the leg, but, in addition, there are sensory disturbances and loss of reflexes. The signs are scattered, or they may be referable to involvement of the entire nerve. Incidentally, the condition is relatively rare. On the other hand, pain down the back of the leg is relatively common, and is frequently due to pressure on the nerve roots of one of the nerves which forms the sciatic, by changes in the vertebral articulations at the point of emergence of the nerve. In either instance, manipulation is contraindicated, but particularly so in true sciatic neuritis, where rest, heat, and removal of focal in-

fection should be carried out. It is, of course, almost as absurd to manipulate a leg because of pain down the back of it, when the pain is due to pressure on one of the nerve roots above. It is not only futile as a therapeutic procedure, but it also helps to mask the true cause of the pain and delays investigation leading to proper diagnosis and appropriate treatment. For these reasons, the procedure known as "stretching the sciatic," in the author's opinion, should be completely dropped as a therapeutic modality. In addition to an almost universal contraindication, it is extremely doubtful if the sciatic nerve is stretched by the procedure, and if it is stretched, whether it makes any difference.

Manipulation is also contraindicated in many definitely diagnosed conditions, such as fractures which are not completely healed, acute subacromial bursitis, cases of which undoubtedly have been labeled neuritis of the shoulder, acute and chronic arthritis, and others. In instances of fibrous ankylosis of joints, whether the result of a cured arthritis, or of prolonged immobilization during the healing of a fracture, this modality may be used, but only with extreme caution, lest a fracture result. Hence, it seems wise to use the modality of manipulation only occasionally, rather than almost constantly, as is done by the chiropractors and osteopaths.

In conclusion, the most outstanding contraindication for manipulation is failure of diagnosis, or incorrect diagnosis. When the condition under treatment is known to be a fibrous ankylosis, and almost only then, manipulation may be used with safety and with benefit.

3135 Webster Street.

ROBERT F. LEGGE,  
Oakland.

*Explains Means of Preventing the Reactions From Vein Feedings.*—Means of preventing the fever and chills which may follow intravenous or vein feedings are explained by Charles M. Nelson, M.D., Richmond, Virginia, in *The Journal of the American Medical Association* for April 8.

Although these reactions have been commonly attributed to various causes, Doctor Nelson says that experiments show the real factor is bacterial contamination of the distilled water used in the solutions for these feedings.

Boiling the water to be used for six hours will destroy the fever-producing agent. Autoclaving (sterilization under steam pressure) for three or four hours will also destroy it. The usual sterilization period tends to enhance its growth.

Even when sterilized by the usual method, the tubing and flasks used in giving intravenous feedings may sometimes cause fevers, as the fever-producing factor may have lodged in them previously while a solution (not autoclaved) was passing through the apparatus.

Doctor Nelson points out that "any organism that is capable of elaborating a fever-producing substance, which thrives at room temperature and which is a common contaminant, may be the offender. No organism will ever be the offender if the distilled water is taken directly from the still—most storage tanks are contaminated by backflow of air when the still cools—and autoclaved immediately."

People who are always taking care of their health are like misers, who are hoarding up a treasure which they have never spirit enough to enjoy.—Sterne.

## ORIGINAL ARTICLES

### MEDICAL TRENDS\*

#### ADDRESS OF THE PRESIDENT

By WILLIAM W. ROBLEE, M.D.  
Riverside

ANOTHER year in the history of the California Medical Association has come and gone. The by-laws provide that, at the annual meeting, the President shall deliver an address which shall summarize for its members the events of the past year and the problems unsolved or in prospect. Your President presents his report in fulfillment of that mandate.

This has been a very busy and eventful year in organized medicine. Administrative, political, economic, and scientific problems have engaged the attention of your officers, committeemen, the House of Delegates and membership to a larger degree than heretofore.

#### INCREASING COMPLEXITY OF MEDICAL PROBLEMS

Each year the problems become more complex. The reasons therefor extend far out into the fabric of civilization. Medicine is but one part of this social picture; and much as some of us may wish for a continuation of the *status quo*, such a policy is impossible. The science and art of medicine are not static, its social and economic features are also subject to evolutionary change. Our thought and action must conform to them or we shall go the way of the dinosaur, and the saber-tooth tiger. They were physically powerful, but lack of adaptability to changed conditions eliminated them.

#### HISTORICAL BACKGROUND

A brief historical résumé of some of the elements of American life that have brought about present-day conditions and problems may profit us.

The American continent was settled by a sturdy, independent group of citizens. They were adventurous spirits who desired freedom from oppression and an opportunity to develop along independent lines. There was room for all on a continent rich in natural resources. Pioneer conditions were not easy and the fit who survived became, because of inheritance and the struggle for existence, a hardy race of independent thinkers, in which the family was the social unit and the family cared for its own. In comparison with our cities theirs were very small towns, life was largely rural, social contacts were confined to small villages and neighborhood gatherings. Life was simple, needs were few and largely provided by the products of the farm.

#### AUTHOR'S RECOLLECTIONS

My memory goes back to grandfather's pioneer farm in northern Wisconsin and of seeing him cut wheat with a scythe, thresh it with a flail and

\* Address of the President. Given at the first general meeting of the sixty-eighth annual session of the California Medical Association, May 1-4, 1939, Del Monte.

take it to a grist mill where the miller ground it for a share of the flour. I have seen grandmother at the spinning wheel, spinning yarn from wool raised on their own sheep, then knitting it into various protective garments. The doctor made his calls in a well-weathered phaeton or on horseback, and he not infrequently had to face a blizzard on foot. His financial receipts were small and often in kind; but he was rich in the confidence and affection of the people he served.

#### TWO SCHOOLS OF ECONOMIC THOUGHT

Immediately preceding and following the Revolutionary War two great schools of economic thought developed in this country. One, headed by Alexander Hamilton, advocated as rapid a development of industry as possible and a restricted electorate veering toward a monarchy. The other, with Thomas Jefferson as its spokesman, advocated a nation of small rural land holders, a more liberal electoral franchise, and a trust in the common people. There were many other lines of cleavage between the economic thought of these men which lack of time does not permit us to consider in detail.

Out of the very strenuous debates of that period, which were serious enough to result in the death of Hamilton at the hands of Aaron Burr, there developed the American concept of government which, while providing for unity of national life, conserves the highest degree of freedom for the individual.

#### SUBSEQUENT DEVELOPMENTS

In the meantime the country was being settled by immigrants from northern Europe who rapidly became splendid American citizens. Take the Irish, for example; what would the country have done for policemen, railroad section bosses or politicians if the Irish had remained in Ireland? Its Friendly Sons of St. Patrick, organized before the Revolutionary War and of which George Washington was happy to become an honorary member, has until this day supplied patriotic leadership in every time of crisis affecting our nation. The English, Dutch, French, and Scandinavians were equally splendid additions to our citizenship. Every man and woman worked, dependency was negligible, and when it did occur the family cared for its own. These conditions obtained until after the Civil War. In the 80's and 90's the picture underwent a decided change. By the beginning of the present century good Government land was about exhausted and the population became less mobile. Yankee inventiveness resulted in the development of a "machine age," whereby hand labor became less in demand and population was concentrated in industrial areas. The capitalist owner of the machines found that he could increase his profits greatly by securing a supply of cheap labor which was imported in great quantities, largely from southern European countries.

Big business was ruthless in competition, and its brutal exploitation of the workers became of great economic and social concern. The great organizations of capital were gradually counterbalanced by the slow, but steady organization of the workers into trade-unions with resultant improvement in

labor conditions, often arrived at after serious strife and occasional bloodshed.

The center of political and economic life shifted to the great cities and factory centers and the farmer ceased being the controlling force in the nation. During these same years great discoveries were made in the realm of theoretical and applied science, and their application to our lives wrought profound changes in them. I have but to mention the changes in transportation and communication within the life of most of those here today to illustrate the point. Material standards of living were elevated and American citizens became the best fed, housed and clothed, educated and amused, that the world has ever known. The trite remark, that the "luxuries of our forefathers have become our necessities," certainly holds good.

#### RÔLES OF PREVENTIVE AND CURATIVE MEDICINE

Medicine, both preventive and curative, partook of this great renaissance. The great plagues of the past no longer mow down our citizens; infant and maternal mortality have been greatly lowered; specific remedies, such as quinin, salvarsan, sulfanilamide, insulin, and the curative and prophylactic sera, have been discovered. The advances in surgery have been unparalleled, and the psychiatrists take our minds apart, polish up the wheels and return many victims of mental disease to useful citizenship.

Of the three great agencies that limited population—famine, pestilence, and war—two are largely under control, and only war is functioning in the same old efficient manner.

Hospital care for sick people has been established with resultant saving of many lives. Few of the younger men in the profession realize that many of their older colleagues, who are their competitors, went through the horse-and-buggy, kitchen-table stage of medicine and surgery.

The factors enumerated have doubled the life expectancy in the past fifty years and the population of the world in the last one hundred years—a greater increase than in the preceding two thousand years.

We were geared in territory, in population, in business and in ideas to a continuously expanding world. There were wars which consolidated the existing system, but none of which disrupted it. The normal state was peace. Democracy had arrived in the advanced countries and appeared on the way elsewhere. Everything had grown so fast during our lives and that of our fathers that we forgot how small the earth was and imagined our particular sort of progress would go on forever. No one doubted that the able and energetic man could get ahead, nor questioned the desirability of his free opportunity to do so. We thought that we had arrived at the goal of human progress and that nothing remained but to improve, on the same lines, the job already done. It was a generation satisfied with itself and the world.

#### HOW AND WHEN THE CENTURY CLOSED

The century closed, not on its chronological date, December 31, 1900, but fourteen years later when

the world with which we had been so satisfied cracked to pieces, never to be restored. Since then, to be sure, there has been progress even of the old sort, and it is not over. But we have discovered that the earth is a limited planet on which there will never be room to do again the spectacular expansions which the nineteenth century saw. However, out of this time of confusion must come something constructive. It will not be the restoration of the nineteenth century, much as some of us would like it. But neither will there be discarded the truths, a repudiation of the standards, the rejection of the experience which it and its predecessors bequeathed. Medicine has, and must continue to share in the adjustments which social evolution has forced upon the modern world.

Many factors enter into the picture of present-day civilization as it exists in this country, but those enumerated will suffice to illustrate the points that I desire to discuss with you today.

#### PRESENT-DAY PROBLEMS

First: Famine and pestilence having been abolished, mothers and babies conserved, generally better housing and food made available, preventive and curative medicine and surgery advanced, what has been the result? It is perfectly obvious that there has been a greatly increased number of people who live to old age.

Second: Industry has no place for the elderly citizen. A man beyond forty or forty-five has a hard time securing a job or holding it after he gets it.

Third: Because of war, dictatorial restriction, tariff walls and competition developing in other countries and dire want therein, commerce has been greatly dislocated. The prunes of Santa Clara, the peaches of San Joaquin, the oranges of the South, no longer find a ready market in other countries. Economic conditions confronting our great agricultural population have been very trying for the past several years. Many of our usually solvent independent farmers have had great difficulty in securing sufficient return from their crops to remain solvent. The dread of the unusual expense entailed by catastrophic illness hangs heavily over them. Your Council and special committees have had several conferences with the State Farm Bureau leaders. They are a splendid group of citizens, and we were able to acquire a knowledge of our mutual problems that will be invaluable.

They desire an insurance program and a moderate liberalization of admissions to the county hospitals. They frankly say that unless we present a helpful program they will consider a connection with a private insurance group and join with those who advocate county hospital admission on as free a basis as are the public schools for the education of their children.

These factors and many others, some of the most serious of which are domestic and political, combine to cause serious unemployment. About 10 per cent of our citizens are without jobs and their dependents suffer with them.

The machine age is upon us, hand labor will be continuously less in demand. It is perfectly obvious

that social and economic life must be readjusted to these changed conditions. The basic needs of mankind, viz., food, shelter, clothing, and care for the sick and disabled—must be supplied. A study of any of these factors must take them all into consideration. Many such studies have been financed and made by philanthropic foundations, the Federal Government, and special interests.

#### APPLICATION TO CALIFORNIA

But we must narrow our consideration to our own State and the problems of sickness herein. We note the studies made by the "Committee on the Costs of Medical Care," under the chairmanship of Dr. Ray Lyman Wilbur, in 1929 and 1930; the study made by Margaret Klem in 1935 for the State Relief Administration; our own economic survey in 1935-1936; the survey now being completed by the SRA, and various special studies made by the Farm Bureau, organized labor, etc.

It is to be noted that none of these studies were made by doctors of medicine, but all were made by lay social workers. Our own survey was supervised by a university economist, the field work being done by untrained State relief workers, a mistake that we have had cause to regret. None but experienced doctors of medicine can accurately evaluate a sickness or disability problem. This has been abundantly proved by our own experience. The basic conclusion reached by the lay surveys is that at least one-third of our population is without adequate medical care. You and I know that such a condition does not exist in this State. I have visited every county society in California and I have put the question to our members individually and collectively, and the reply has been invariably that any person applying to a doctor of medicine for medical care either will receive it at once or be directed to where it can be secured.

The State Medical Society of New Jersey has made a survey by its own members, and they have reached the conclusion that not over 5 per cent of their people are not receiving adequate care and that the lack is largely of their own choosing, the facilities being available if called for. Organized medicine is fully conscious of the medical needs of the public, and is willing and able to meet these needs, and has been doing so at the rate of one million dollars of free service per day during these years of special stress!

#### CONCLUSIONS OF THE LAY ECONOMISTS

The major conclusions reached by the lay economists and socialists are three in number:

First: That one-third of the people are without adequate medical care.

Second: That some form of sickness insurance under governmental regulation is the answer.

Third: That this must be compulsory.

These conclusions have been publicized from the platform, the press, the "halls of learning," and legislatures, until a large portion of the population believes them to be true. Any statement can be iterated and reiterated often and vociferously enough to cause its acceptance by many people, and in fact very many of our people are thinking and

saying that they know better than the doctors how medicine should be practiced. They do not question the doctors' ability to treat the sick, but they do question the *modus operandi* by which his skill shall be available.

#### ANALYSIS OF THE CONTENTIONS

Of the three basic contentions just enumerated the medical profession is in hearty accord with the initial clause of the second, namely, that an application of the insurance principle to the hazard of catastrophic illness is a proper measure, and organized medicine has laid down a set of principles to guide any such endeavor. These principles safeguard both the patient and his physician. They provide for the free choice of physician, no interference with medical practice by a political agency or organization for profit, and no compulsion. The aim is to provide adequate medical care for all the people by the physician of their choice at a price that is fair to all the people, including those who render the service.

#### PROVISION FOR MEDICAL CARE ON A PERIODIC PAYMENT BASIS

The principle that a person in time of physical and financial competence may provide on a budget basis, by fractional payment, for catastrophic need, is sound, and to be encouraged. This common-sense application of basic principles, however, does not satisfy the agitators for radical socialistic treatment of the problem. A goodly number of persons high in the councils of the State, both nationally and in our own State, and even a small minority of our professional colleagues, will not be satisfied with anything that is short of compelling regimentation of both the doctor and his patient. They would provide for another European experiment in social economics which would be dictatorial, un-American, political, regimental, and entirely beyond any guidance or control by the doctors of medicine who are best fitted by experience to handle the problem. This is a far cry from the principles enumerated and fought for by our forefathers, to which I called attention early in this address. They fought compulsion, regimentation and unjust taxation in every way possible. Are we, then, their sons, to flaunt their example and sit supinely by while these things are forced upon us?

The inherent right of both the patient and doctor for protection is largely ignored by the economists, social workers, and politicians in the plans they evolve. Medicine cannot be practiced on a mass-production basis. No compulsory panel system can assure the individual that careful attention to which the American people have been accustomed.

#### RÔLE OF THE PHYSICIAN

The physician has also been vested by custom and the State with certain rights that cannot lightly be cast aside. He has, in perfect good faith under the law of the land, spent years of time and at least \$15,000 in cash in acquiring the necessary training for his professional work. Medicine is big business. The ten thousand doctors of medicine registered in this State spent not less than \$150,000,000 in

their preparation for service. They have families depending on them. The State has licensed them to conduct their professional work in competition with their fellows, each man making a success or failure in accordance with his capacity and worth. This is the American way, and we insist upon its continuance.

#### STUDIES BY ORGANIZED MEDICINE

The officers and committeemen to whom you have given authority to care for your interests have not been derelict in their duty. The American Medical Association and our own State Association both felt impelled to call special sessions of their Houses of Delegates for the consideration of pressing economic questions involving our profession. At these sessions the recommendations of your officers and committees were received, policies were debated and conclusions arrived at with which you are familiar.

In this connection I quote as follows from the annual report of the Director of the Bureau of Economics of the American Medical Association:

"Interest in Medical Care Plans.—Since the special session of the House of Delegates in September, 1938, some forty or more medical societies have sought assistance in the study and development of forms of medical service suited to their respective localities.

"The growing interest of medical societies and of the public in special arrangements for organizing payments for medical services can be almost directly measured by the increasing number of experiments conducted by state and county medical societies. In 1934 about 150 plans for distribution of medical services were being conducted by medical societies in various communities in the United States. By 1935 this number had grown to 200, by 1936 to 250, by 1937 to 350, and at present the number is in excess of 450.

"The existence of these organizational plans for the delivery of medical services is a direct refutation of the assertions that have been made concerning the unwillingness of the medical profession to tolerate change in the arrangement for payment for medical services. As a matter of fact, medical societies throughout the United States have in operation more experiments with new plans for the distribution of medical services than all the proponents of group payment plans have ever proposed."

#### CALIFORNIA PHYSICIANS' SERVICE

We, in California, have responded to the call and are rapidly perfecting a plan whereby prepayment of medical care on a coöperative basis can be secured.

The organization of our Physicians' Service corporation has entailed a tremendous amount of work on the part of the Council, the legal department, the Board of Trustees, of the corporation, and the special committees. We owe them our heartfelt appreciation. Such a state-wide effort has not heretofore been undertaken, and its progress is being observed with keen interest throughout the nation. It is an honest effort to supply, under

proper auspices, a service of which the people at large feel the need. This effort will settle the question as to whether the public generally will patronize such a service. We believe it to be in line with modern economic thought.

The question has been asked repeatedly why was such a plan not offered ere this? The answer is that, in the opinion of your committees which have had this study in hand, neither the public nor the profession were ready for it. This year the various interested lines have converged both within and without the profession, and the time seems ripe for such a social experiment. The details, up to this date, will be supplied by the speakers who follow me on this program.

#### OTHER POLITICAL PROBLEMS

Our political interests have been this year very important, as there has been both a general state election and a session of the Legislature to keep under observation. Under the guidance of our legislative and special committee, the antivivisection initiative was decisively defeated. There is the usual collection of proposed laws in the Legislature which interest us. Some of them are very vicious, and they are demanding the close attention of our Legislative Committee. Any calls for assistance from the membership at large that may be issued must, as in the past, be loyally responded to.

The next regular or special state election will see other initiative measures qualified for the ballot. We hope to have a Basic Science measure for approval of the electorate at that time. These measures, both good and bad, will require our energetic attention.

#### SCIENTIFIC ACTIVITIES

Our scientific work is being well handled. The County Society programs are uniformly excellent, the state-wide postgraduate sessions are justifying the work of the committee, the program arranged for this annual session is unusually attractive, and we trust that those in attendance will take part freely in the discussions.

#### MEMBERSHIP

Membership: Our membership for the year 1938 reached an all-time high. We certified 6,219 members in good standing to the American Medical Association for that year. I would urge continued vigilance on the part of the secretaries of county units in order that all eligible, desirable doctors of medicine may be enrolled.

#### WOMAN'S AUXILIARY

I desire to draw attention to the excellent work done by our Woman's Auxiliary. Their acquaintance, one with another and with their husband's problems, has developed a solid substantial group of helpers that is wielding a very powerful influence for scientific medicine. In behalf of the Council, I extend to them warmest appreciation for their helpful influence.

#### COUNTY SOCIETY VISITATION

Your President has enjoyed visiting the county societies. California is an unwieldy State to ad-

minister, and a systematic visitation of our county units is a time-consuming effort; but it is well worth while. A first-hand discussion of our problems profits both the society members and especially the visiting officials. I recommend a continuance of that work.

#### THE FUTURE

As for the future of organized medicine I have no fear. We shall have our differences of opinion as to policies and leadership, but they will be solved in the American way. In the future, as has been in the past, after free and frank discussion we shall acquiesce in the will of the majority. Any other course is unthinkable.

Finally, your President desires to express his heartfelt appreciation for the support and friendly consideration that have been extended to him, and he requests that the same loyal support be given to President Charles A. Dukes during his coming year of service.

### X-RAY TREATMENT OF CARCINOMA OF THE BREAST\*

By LYELL C. KINNEY, M.D.  
San Diego

DISCUSSION by William E. Costolow, M.D., Los Angeles; Alton R. Kilgore, M.D., San Francisco; Robert S. Stone, M.D., San Francisco.

**B**ETWEEN the enthusiastic claims of some radiologists and the iconoclastic statements of some surgeons there are certain proven facts concerning the value of x-ray in carcinoma of the breast that can now be accepted. Any critical estimate must be based on a careful analysis of what constitutes early curable cancer and what must be considered late cancer, where only palliation can be expected. It is certain that x-ray cannot replace surgery in early operable carcinoma of the breast, and it is equally certain that radical surgery cannot replace x-ray or improve the palliation in late advanced cancer. The important problem is how far, if at all, surgery and radiation should overlap in the treatment of carcinoma of the breast. Early carcinoma of the breast where the growth is limited to the gland, or Group 1, is solely a surgical problem. The radical surgical procedure is well standardized, and the five-year cures have reached a constant level of approximately 75 per cent in well-organized clinics. There is no evidence that radiation, either before or after surgery, will improve this result. There are certain cases that are inoperable because of age or physical condition, where it is necessary to resort to radiation instead of surgery, but the best that can be expected is a 45 per cent survival rate, in contrast with a 75 per cent obtained by radical surgery.

#### PRACTICAL PROBLEMS

The practical problem arises as to which case is early and localized without extension to the axillary glands. There is approximately a 30 per cent error in the clinical estimate of axillary metastasis by

\*Read before the Radiology Section of the California Medical Association at the sixty-seventh annual session, Pasadena, May 9-12, 1938.

palpation; that is, the palpable glands may not be metastatic, and there may be small metastatic glands that are not palpable. Another practical consideration is whether a localized tumor of the breast is, or is not malignant. In the absence of aspiration biopsy, which is not available or accurate in most clinics at this time, the final diagnosis must be made by surgical excision and frozen section.

It seems logical at this time to consider any localized, freely moveable lump in the breast as a possible carcinoma that should be immediately excised, with preparations made for microscopic diagnosis and for radical surgery at the time of the excision if proved malignant. If the pathological survey of the axillary contents shows no evidence of metastasis, there will be no indication for radiation. If, on the other hand, metastatic glands are discovered the case is no longer of Group 1, and the question of postoperative radiation must be considered.

There is no evidence at this time to justify extensive preoperative radiation or ovarian sterilization before a microscopic diagnosis is made in an early tumor of the breast without palpable axillary metastasis. The only indication is immediate microscopic diagnosis coincident with radical surgery if the growth is malignant.

#### LATE CARCINOMA OF THE BREAST: GROUP 3

Late carcinoma of the breast, or Group 3, where the growth is extended beyond the line of defense in the axillary glands, is strictly a radiation problem. According to Bloodgood, where the glands at the apex of the axilla are involved there is less than 5 per cent chance of five-year cure from surgery. If the axillary glands are fixed or massive, if there is involvement of the supraclavicular glands, if the growth is fixed to the chest wall, if there is extensive involvement of the skin or multiple skin metastases, or if roentgenographic survey shows distant metastases, the case is inoperable. There is no method today that will offer any appreciable percentage of five-year cures, and the problem is that of securing the greatest palliation. The attempt at radical surgery in these cases will shorten the patient's life, increase the suffering, and cannot be justified even from a palliation standpoint. Furthermore, the recession of such a growth under radiation does not render the case operable or increase the chance of radical surgery being curative or palliative. On the other hand, fractional radiation carried to skin tolerance will usually arrest the growth and the glands in a large percentage of cases, and will give maximum palliation without prolonged discomfort. There is a small group of cases where growth in the breast does not prove radio-sensitive and where simple mastectomy, following thorough radiation, is indicated to prevent or remove local ulceration. The radiation will not materially increase the length of life in Group 3 cases, but the palliative control from fractional radiation offers so much more than radical surgery that the lines of operability should be strictly drawn to those cases where the growth is localized to the breast or where there is no evidence that it is past the first defense barrier.

#### OPERABLE CARCINOMA OF THE BREAST: GROUP 2

In about 70 per cent of the cases of carcinoma of the breast that may be considered early and operable, the axillary glands are involved, Group 2. The average case is of at least six months' duration. The well-established results from efficient radical surgery in this group are a 25 per cent five-year cure. Variations from this percentage largely depend on the strictness with which the rule of operability is applied. This 25 per cent recovery rate is the maximum that can be expected from radical surgery, and if this surgical rate is to be increased it must come from the proper combination of radiation and surgery.

There is no proof that x-ray should replace radical surgery where the axillary glands are involved. Adair has shown that with a tissue dose of 3500 r, 22 per cent of these cases will show microscopic disappearance of axillary metastases, but this is not better than can be obtained by surgical removal. In another series of cases treated by radiation alone, Adair has shown that there are no five-year cures when axillary glands are involved. Thus, the surgery must be as radical and complete as possible and as thorough as though no additional help were expected from radiation. There is no reason to believe that where the surgery is incomplete, or where axillary glands are discovered which cannot be removed, postoperative radiation will increase the chance of cure.

#### POSTOPERATIVE RADIATION

The value of postoperative radiation in increasing the five-year curability of cases with axillary metastases is still seriously questioned. White from the Roosevelt in New York, Graham from the Crile Clinic, Simmons from the Massachusetts General Hospital, and Harrington from the Mayo Clinic, deny that there is any increase in the recovery rate following postoperative radiation. On the other hand, there are large and significant series showing 40 to 50 per cent five-year cures in Group 2, with a combination of surgery and radiation. It is quite significant that the critical analysis from the University of Pennsylvania shows only twelve deaths in known Group 2 cases which had radical surgery and postoperative radiation, and only one death in Group 2 cases which had pre- and postoperative radiation. While statistics differ with various clinics and depend on the accuracy of their analysis as well as upon the efficiency of the surgery and the radiation, and careful attention to operability, there is a wide consensus of opinion that radiation adds 10 to 15 per cent to the life expectancy in Group 2 cases when combined with radical surgery.

#### MODERN FRACTIONAL RADIATION

The pre- and postoperative treatment of carcinoma of the breast has changed materially with modern fractional radiation. There are two methods at present that can be considered adequate. The first, and most logical, has the approval of Pfahler. The breast is radiated tangentially, including the anterior mediastinum and lateral chest wall. The

axilla is cross-fired through at least three areas, including the supraclavicular glands. These five to six portals are treated with fractions of 300 r at 200 K. V. with copper or Thoraeus filter, spacing the dosage on each port at forty-eight to seventy-two hours and reaching a total of approximately 900 r. The cumulative skin dose amounts to about 480 r effective, and the total tissue dose in the axilla averages about 1700 r. This preoperative series is followed within two weeks by radical surgery, and the postoperative radiation is resumed in two to three weeks' time, using the same portals and dosage. Each port is given an additional 900 to 1500 r, making a total of 1800 r for the pre- and postoperative series. The fields after the surgery on the chest wall may be given at 140 K. V., but the cross-fire of the axilla and the supraclavicular glands should remain at or above 200 K. V. This method does not cause undue delay in the surgery, and does not render the surgery more difficult or the healing less prompt or satisfactory.

The second method of radiation that may be considered adequate, attempts the maximum destruction of the carcinoma and the maximum reduction in the axillary glands before the surgery. Using at least two tangential ports to cross-fire the breast, and at least three ports to cross-fire the axilla and supraclavicular glands, fractions of from 200 to 300 r are given on alternate days to each port, building up a total of at least 2000 r per port. Using 200 r every second day or 300 r every third day, this gives a cumulative dose of approximately 800 r on each port and a tissue dose of about 4000 r in the axilla. The skin reaction is marked and the surgery must be delayed from six to eight weeks. The advantages of this method are that 33 per cent of the breasts become microscopically free from carcinoma and that in 22 per cent there will be complete destruction of the axillary glands. However, the two months' delay is a mental hazard to the patient; the operation is more difficult, the bleeding increased and the healing delayed.

#### RADIATION IN GROUP 2 PATIENTS

When radiation is initiated after radical surgery in Group 2 cases, the problem is considerably different. With the breast and pectoral muscles removed, the chest wall is, on the average, three centimeters thick, and the axillary fold has disappeared. There is little chance to cross-fire the operated area or the supraclavicular glands, and the opportunity to cross-fire the axilla is considerably diminished. Granting that the lethal dose of mammary carcinoma cells lies between 2500 and 3500 r, postoperative radiation must depend upon growth restraint rather than on cell destruction. If the surgery has been complete, and there is residual carcinoma, it must be looked for beneath the operative field in the intercostal lymphatics or the mediastinal chain, or beyond the operative area at the apex of the axilla and the supraclavicular glands, or hidden around the axillary vessels and brachial plexus. In order to cover these areas, the anterior chest wall should be radiated from the sternum to the posterior axillary line and from the costal margin to the clavicle. This may be either by direct portals

at 140 kv. or tangential areas at 200 kv. The apex of the axilla and the supraclavicular region may be cross-fired through an anterior and a posterior port; and if the arm can be abducted, by a direct axillary port. The radiation in this region should be at 200 kv. Using fractional doses at 200 to 300 r. and alternating the ports so that the radiation to each is spaced at two to three days, the dosage to each area may be built up to 900 to 1200 r without undue skin reaction. Such a series should be repeated in six to eight weeks, and again at three months after the second series. There is no indication to damage the skin beyond the point of a moderate erythema, which can be repeated at suitable intervals.

The above considerations are applicable only to strictly Groups 1 and 2 cases, where the growth has not passed the first line of defense in the axillary glands. The indications as noted are complete radical surgery, combined with pre- and postoperative radiation, or postoperative radiation when axillary glands are first discovered at surgery, or where the cooperation of the patient or surgeon cannot be obtained for preoperative treatment.

A sharp delineation should be attempted between early operable cases, limited to the breast and low, moveable axillary glands, and between the carcinoma that has extended beyond these points, which must be considered late and inoperable. It is only in the former group that radical surgery is indicated or curative, and where additional radiation may increase the percentage of cure. Failure to appreciate this distinction submits the patient to unnecessary surgery and discredits the value of pre- or postoperative radiation as a curative factor.

The treatment of Group 3 carcinoma is, at best, palliative, and is strictly a radiation problem. At the expense of repetition, carcinoma of the breast should be considered inoperable and suitable only for palliative radiation where there are high, fixed axillary glands, supraclavicular glands, fixation of the breast or multiple skin metastases. Also inflammatory carcinoma should be considered inoperable and belonging to this group.

#### TREATMENT OF INOPERABLE CARCINOMA

The treatment of inoperable carcinoma should include cross-fire of the breast through as many portals as its size will permit, and cross-fire of the axilla and supraclavicular glands. Fractional doses of 200 to 300 r, spaced at a two-to-three-day interval to each port, are built up to a total dosage of 1500 to 2500 r per port. The actual dosage will depend on the size of the port and the skin reaction required by the clinical judgment of the operator. The underlying principle is that of repeated fractional radiation over a period of three to four weeks, reaching a total of skin tolerance. We, personally, prefer large portals, except in the direct axilla. The breast portals and supraclavicular port are tangential and overlapping, and are carried to at least 1500 r. If the growth does not prove radio-sensitive at this dosage or threatens local ulceration, a simple mastectomy is considered after the subsidence of the skin reaction. If the growth is apparently radio-sensitive at this point, the case is handled entirely by radiation.

The treatment of Group 3 cases must be well individualized. In each case the program should depend on a careful survey of the general condition of the patient, the character and extent of the growth, and the extent of possible metastases. A thorough roentgenographic survey of the chest and skeleton for metastases is just as essential here as before surgery in early operable cases. It is at least discouraging to have arrested an extensive growth in the breast and axilla and to find immediately thereafter undiscovered metastases in the chest or cervical spine, or a threatening pathologic fracture in the hip or pelvis. It is this sort of case that tempts the patient's family or the referring physician to feel that x-ray has "scattered the cancer" and to question the value of radiation. If there are distant metastases, these should be recognized and treated, either before or with the attack upon the primary lesion. The presence of metastases will also determine the indication for treatment of the breast, keeping in mind that the ultimate object is maximum palliation.

#### SUMMARY

1. The prognosis of carcinoma of the breast depends primarily on early recognition and complete radical surgery.
2. Early carcinoma clinically localized to the breast should have immediate biopsy by excision and radical surgery. If metastatic glands are found in the axilla or if the growth is undifferentiated of pathological Groups 3 or 4, the surgery should be followed by postoperative radiation.
3. Early carcinoma, with clinically enlarged axillary glands, should have preoperative radiation before radical surgery, followed by postoperative radiation. If this is not possible, the surgery should be followed by postoperative radiation, as there is evidence that radiation will add 10 to 15 per cent to the expectancy of cure from surgery.
4. The value of x-ray in combination with radical surgery in Group 2 cases does not justify operating cases that are not strictly localized, or expecting the radiation to add to the curability following questionable surgery.
5. Pre- and postoperative radiation are never an excuse for incomplete surgery in operable cases. Postoperative x-ray following incomplete surgery will not increase the probable cure.
6. Carcinoma of the breast, which is not clinically localized to the gland and moveable axillary lymphatics, must be considered late and inoperable. Only palliation is possible, and that is best obtained by radiation.

1831 Fourth Street.

#### DISCUSSION

WILLIAM E. COSTLOW, M.D. (1407 South Hope Street, Los Angeles).—Doctor Kinney has thoroughly covered most of the phases of x-ray treatment of breast cancer. Surgery alone is probably not curing any more cases of cancer of the breast today than it did a quarter of a century ago. Halsted and the men who followed him undoubtedly performed the radical breast amputation as thoroughly as any of our present-day surgeons, and obtained similar results. Operation cannot be made any more radical, nor can one expect a higher percentage of cures from surgery alone. Furthermore, there is no evidence to prove that the

cautery or the electrosurgical will produce any better results than the cold steel knife.

It is no wonder then that surgeons now wish to cooperate with the radiologist in trying to better the surgical results in cases with axillary extension, which heretofore have been admittedly poor.

As Doctor Kinney has pointed out, postoperative irradiation has definitely added a small percentage of improvement to the five-year curative results. In addition, there is the enormous palliative value of x-ray in clearing up local recurrences in that group of cases dying of visceral metastasis, before the end of the five-year period.

We agree with Doctor Kinney that the advanced cases with large axillary glands, supraclavicular glands, extensive skin involvement (inflammatory type) or fixation to chest wall, generally should be taken care of by irradiation alone. Some massive involvements will show marked local regression or complete disappearance with thorough x-ray treatment. It may be thought that when these advanced cases are made clinically operable, surgery should be used. Experience, however, shows this to be unwise. These cases are usually of high-grade malignancy, and probably have visceral or bony extension, or some smoldering local areas which may be relighted, with rapid local recurrence taking place. The prognosis in women under forty is extremely poor, regardless of the stage of the disease.

There is a group of cases which offers a field in which five-year curability may be increased. This is stage II, with axillary involvement. This group is now being submitted to preoperative irradiation. This procedure has not been employed long enough for a large group of five-year statistics to be collected. Adair, in 148 operable cases treated by postoperative x-ray following radical operation, had a 40 per cent five-year cure (50 per cent with axillary glands). In 193 operable cases with preoperative x-ray, 64 per cent are living after four years. Adair states that formerly 60 per cent of his operable cases showed axillary involvement, whereas since using preoperative x-ray he had found only 40 per cent with axillary involvement.

Preoperative x-ray should be thorough and operation withheld until the full effect of the treatment is secured and the reaction allowed to disappear. We usually divide the breast and axilla into multiple areas, as described by Doctor Kinney, but apply only 100 r daily to each area, usually to a total of 2000 to 2500 r. The smaller breasts may be covered by two 10 by 15, or 15 by 20 tangential areas, but larger breasts may require multiple areas in order to obtain the desired tumor dosage. Operation is usually delayed until after two months. In our cases there has been very little added operative difficulty, and healing has taken place in all cases.

✱

ALSON R. KILGORE, M.D. (490 Post Street, San Francisco).—It is refreshing to hear this clear and well-balanced exposition of a still controversial subject. I can contribute only complete agreement with Doctor Kinney that the great contributions of radiation to the treatment of mammary cancer have been (1) to encourage restriction of surgery to those cases offering at least reasonable hope of cure; (2) to increase apparently definitely the survival rate following surgery in the more advanced cases operated; and (3) to offer invaluable palliation to inoperable patients.

✱

ROBERT S. STONE, M.D. (University of California Hospital, San Francisco).—Doctor Kinney has presented a masterful survey of the subject, with which I am in general agreement. I shall not reiterate those points on which we agree, but shall stress those on which we differ.

Group 1 is a broad grouping which I believe should be subdivided. If the lump in the breast is such that a diagnosis of cancer cannot be made clinically with a fair degree of accuracy, then, of course, surgical excision is in order, with preparation for an immediate radical mastectomy if the frozen section shows it to be cancer. If a presumptive diagnosis of cancer can be made on clinical grounds, then I believe that at least a short course of preoperative radiation should be given. It has frequently been shown that cancer transplanted into an area previously irradiated has a much less chance of growing. Advantage of this should be taken by giving an immediately preoperative short course

as a minimum. It delays operation only a few days and does not increase the operative difficulties.

The author showed that there is a 30 per cent error in diagnosis of the axillary glands in supposedly Group 1 cases. It is probably in this 30 per cent of cases that preoperative radiation has its chance to be of benefit. Let us remember that if we can increase the five-year survival by even five in one hundred, it is just as important to save these five women in Group 1 as in Group 2.

In Group 2 patients, I believe that preoperative irradiation should be used for the same reasons as preoperative irradiation in Group 1. In Group 2, because the surgical results are so poor, a thorough course of radiation should be used rather than a short course. It must be remembered that there are practically no statistics on the value of preoperative protracted fractionated courses. To base our opinions of the value of preoperative radiation on older statistics is like basing an opinion of the value of surgery on late nineteenth century surgery.

Another point on which we disagree is on the value of repeated courses of radiation after surgery. If the cancer was found to be limited to the breast and axilla, we should give one really thorough course of irradiation, such that we would not care to repeat, and rest with that. Most authorities are agreed that the chance of irradiation curing lies in the first attack on the disease and not on repeated attacks.

The number of fields to be used and their size will always be a matter of individual opinion. In general, I use a smaller number of fields and larger total doses per port than the author indicates. From sad experience, I should like to emphasize what the author insinuated, namely, that the ports must be arranged so as not to get large doses of radiation in the lungs, either by crossfire or direct radiation.

### DERMATOMYOSITIS\*

#### REPORT OF CASE ASSOCIATED WITH RHEUMATIC HEART DISEASE

By FREDERICK KELLOGG, M.D.

*Long Beach*

AND

FELIX CUNHA, M.D.

*San Francisco*

DISCUSSION by Robert W. Langley, M.D., *Los Angeles*;  
Hiram E. Miller, M.D., *San Francisco*.

**DERMATOMYOSITIS** is a rare disease best described as an acute, subacute, or chronic disease of unknown origin, characterized by a gradual onset with vague and indefinite prodromata, and followed by edema, dermatitis, and multiple non-suppurative inflammation of muscle. The first clear-cut cases were described independently by Unverricht,<sup>1</sup> Hepp,<sup>2</sup> and Wagner<sup>3</sup> in 1887.

#### **PATHOLOGY**

Early the skin and subcutaneous tissues show edema, infiltration with neutrophils and some areas of hemorrhage. Later there may be desquamation of the surface layers with degeneration of the corium and disappearance of the papillae. The changes in muscle are characteristic. First, there is transudation of fluid and interstitial and perivascular infiltration of leukocytes. The muscle bundles show a patchy involvement, and normal ones may be seen among others showing all stages of degeneration. Later, evidence of regeneration

of muscle appears in scattered areas, and there is much increase in connective tissue.

#### **ETIOLOGY**

The cause of the disease is obscure. Certain features suggest an infective origin, namely, the first symptoms frequently following some febrile disturbance such as tonsillitis, influenza, measles, rheumatic fever, etc.; the demonstration often of foci of infection; the febrile course; the presence of splenomegaly in many cases; and the relapsing nature of some cases.

Various organisms have been thought specific by different observers, but in many cases no organisms are found. Probably the disease is a syndrome which may result from a variety of causes. All ages are affected, and the incidence in both sexes is approximately equal. The white races have been almost exclusively affected. Winter seems the commonest time of onset.

#### **SYMPTOMS**

Following the vague prodromata, symptoms appear insidiously. These consist of increasing muscular weakness with pain, swelling and rigidity, which is usually widespread and symmetrical, and accompanied by a peculiar exanthem and a brawny edema. The muscles alternately feel firm and tough, or soft and boggy. The limbs are most commonly affected and, in contrast to trichinosis, the muscles of the eyes are not often involved. The rash usually has a peculiar heliotrope color and is distributed over the affected muscles. Later in the disease the rash may resemble various types of skin disease, and as an end-result brownish pigmentation is common. Eventually the skin becomes thickened and may even resemble scleroderma.

A high intermittent or remittent fever may be present during the acute stages, but frequently is of mild character. The spleen is often enlarged. Leukocytosis is common but, typically, no eosinophilia is present. Creatinuria has been reported. This is not primary, but is undoubtedly secondary to the anatomical changes in the muscles.

Death is common during the acute stage, usually from intercurrent infection. If the patient lives long enough, the pain and edema begin to subside and fibrosis of the skin and muscles develops, resulting in marked deformity. The skin then becomes hard and inelastic and bound down to the underlying muscles, which may be felt as board-like wasted bands.

Recovery is often accompanied by residual weakness and contractures, and certain areas of skin may always remain sclerotic. However, it is possible for the patient to recover completely after a most severe attack. Unfortunately, relapses are common. About 50 per cent of the reported cases die, some in the acute stages, but more after months of illness.

#### **DIFFERENTIAL DIAGNOSIS**

Dermatomyositis, during its acute stage, may so simulate trichinosis that early reports used the title "Pseudo-trichiniasis." However, in trichinosis, changes are usually most prominent in the

\* Read before the General Medicine Section of the California Medical Association at the sixty-seventh annual session, Pasadena, May 9-12, 1938.

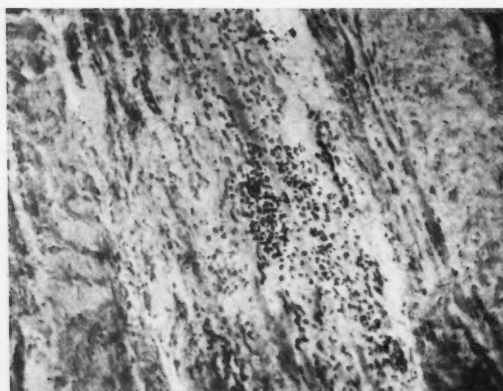


Fig. 1

Fig. 1.—Photomicrograph of muscle from calf. Note infiltration of leucocytes about muscle bundles and increase in connective tissue. (X105)

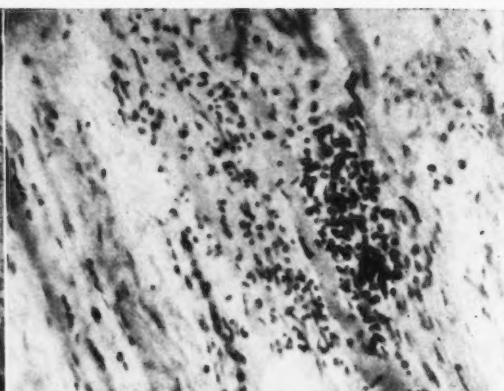


Fig. 2

Fig. 2.—Photomicrograph of muscle from calf. Varying degrees of degeneration of muscle are shown. Note wavy contour of fibers and fibrosis. (X210)

ocular muscles. Eosinophilia, which is uncommon in dermatomyositis, is always present in trichinosis, and larvae may be found in the blood or muscle.

Polyneuritis may cause confusion, especially as in some cases of dermatomyositis the nerves are involved as well. However, in uncomplicated polyneuritis, edema and muscular swelling are absent.

Scleroderma can be excluded in the chronic cases only by the presence of myositis. Many believe that the two diseases are different manifestations of the same morbid process, for sclerodermatous changes often accompany dermatomyositis.

#### TREATMENT

All forms of therapy have been advocated, none of which have been specific. Stress should be laid upon the prevention of deformity and upon various orthopedic and physical therapeutic measures which should be employed if the patient recovers. The patient presented was treated with autogenous vaccine, as was one other patient reported by McGarrah.<sup>4</sup> Ordinarily no bacteria are found in biopsy specimens. McGarrah isolated a culture of *Staphylococcus albus* from a nasal smear. As this gave a positive intradermal reaction, a vaccine was made and administered with apparent benefit.

#### REPORT OF CASE

M. B., a 22-year-old female milliner, of Italian descent, was first seen on the Medical Service of the University of California Hospital in September, 1935, complaining of pigmentation and muscular weakness of two years' duration. Eight years previously, at the age of fourteen, she was vaccinated for smallpox. A small brown area of pigmentation appeared at the site of vaccination which extended over the entire upper left arm during the next few years, and similar areas of pigmentation appeared on the right arm. This was accompanied by a decrease in size of the left arm. Two years before entry, at the age of twenty, she noted nodules in the calf of the left leg and weakness of both legs. This was followed by edema and she was treated for congestive cardiac failure, with improvement. However, contractures of her calf muscles developed, so that she was unable to walk flat-footed. For eighteen months before entry she was confined to bed with generalized muscular weakness and stiffness. With the onset of stiffness the pigmentation previously noted spread over the entire body. During the last month of her acute illness she had had fever and profuse perspiration, and had lost

thirty-five pounds in weight. No muscular pain had been noted. Infected ingrown nails of both great toes had been present about three years. Her past history was not remarkable, except for "growing pains" at thirteen and fourteen years of age.

Examination in 1935 revealed an emaciated girl with fixation of elbows, knees, and hips in 90 degrees flexion. The ankles were fixed in plantar flexion. Generalized pigmentation was present, with the exception of the nose, palms, and soles of the feet. The pigmentation was mottled and of a dirty-brown color. The pigmented area about the left upper arm had sharply demarcated borders. All extremities were wasted, and all muscles felt indurated and cord-like to palpation. Slight generalized pitting edema was present. The mouth could be only partially opened. The heart was slightly enlarged to the left and right. The rhythm was regular. A presystolic murmur, ending in a booming first sound and followed by a blowing systolic murmur, was heard at the mitral area. The pulmonic second sound was accentuated and reduplicated. The blood pressure was 116 systolic, and 70 diastolic. The abdomen showed an enlarged spleen at the left costal margin. Clubbing of the fingers was present. The left great toe showed an infected ingrown nail. The patellar and abdominal reflexes were barely elicited.

Extensive laboratory procedures, including routine urine and stool examinations, Wassermann test on the blood, phosphorus and calcium determinations of the blood, culture of the blood, gastric analysis and spinal fluid examination, were normal. The blood showed a mild secondary anemia and leukopenia. No eosinophilia was present. Creatinuria was present, the twenty-four-hour output of creatin being 98 milligrams and of creatinin being 218 milligrams. Culture of the toe showed *Staphylococcus albus* and *Bacillus subtilis*. A biopsy from the right calf showed characteristic lesions of dermatomyositis (Figures 1 and 2). Culture of tissue obtained at biopsy showed nonhemolytic streptococci.

X-ray films of the chest showed the heart to be enlarged and of a mitral configuration. Films of the lumbosacral spine showed extreme lumbar lordosis. Films of the elbows showed no lesions of bone or joint.

While under observation the patient was febrile, the fever being remittent at times and intermittent at others, reaching maximum of 40 degrees Centigrade. A vaccine was prepared from a mixture of streptococci isolated from a stool culture, and the muscle biopsy and staphylococci from the infected toe. This vaccine was administered intravenously at weekly intervals. With large doses temporary exacerbations occurred, but with small doses improvement appeared. Following the subsidence of the acute involvement, exercises and physical therapy were instituted. At this time the patient was unable to feed herself or to turn in bed. During the past two years improvement has gradually occurred, until now she is able to walk alone with difficulty and can care for herself in bed.

## COMMENT

The history and findings of the patient reported are typical of dermatomyositis and show the diagnostic triad of eruption, edema and myositis. Unusual features of this case were the absence of pain, the presence of mitral stenosis, and the isolation of organisms in the biopsy specimen. The onset in this patient was very gradual, and an organism of low virulence, undoubtedly introduced at the time of the vaccination, slowly spread throughout the body over the next few years.

Dermatomyositis may at times involve the myocardium, but never causes valvular lesions as seen in rheumatic heart disease. The mitral stenosis was probably due to rheumatic infection, as manifested by the "growing pains." These preceded the vaccination and were probably independent of the dermatomyositis.

Apparently, an autogenous vaccine was of value in this patient as in that of McGarrahan. Unfortunately, it is seldom that organisms can be isolated from muscle, and it is this fact that has cast doubt on the infectious etiology of the disease. It is of utmost importance, however, that contractures be prevented as much as possible, and that fixation of limbs occur in positions favorable to physiologic function. Following the subsidence of the acute disease, proper massage and graded exercises and manipulation are of inestimable value in rehabilitation.

## IN CONCLUSION

1. A case of dermatomyositis is reported which followed vaccination for smallpox and which was associated with rheumatic heart disease.

2. Because of its apparent benefit in this case, further trial of autogenous vaccine in the treatment of dermatomyositis is indicated.

211 Cherry Avenue.  
450 Sutter Street.

## REFERENCES

1. Unverricht, H.: Polymyositis acuta progresiva, *Ztschr. f. klin. Med.*, 12:533-549, 1887.
2. Hepp, P.: Über Pseudotrachinose, eine besondere Form von acuter parenchymatöser Polymyositis, *Berl. klin. Wchnschr.*, 24:297-299, 1887.
3. Wagner, E.: Ein Fall von acuter Polymyositis, *Deutsch. Arch. f. klin. Med.*, 40:241-266, 1887.
4. McGarrahan, J. D.: Dermatomyositis, *J. A. M. A.*, 102:680-681 (March 3), 1934.

## DISCUSSION

ROBERT W. LANGLEY, M.D. (1930 Wilshire Boulevard, Los Angeles).—The condition of dermatomyositis occurs infrequently. Its recognition justifies attention and recording. The outlook is usually quite poor. There is little a cardiologist may contribute to this subject. Doctor Kellogg states that dermatomyositis may at times involve the myocardium, but I have been unable to substantiate this statement from any proved cases in the literature. Two fatal cases were recently reported by members of the staff of the Hospital of the Good Samaritan in Los Angeles. Autopsies on both cases failed to show myocardial damage, either gross or microscopic.

There is no question about the diagnosis of rheumatic heart disease of moderately severe degree in this case. The congestive heart failure responded satisfactorily to medical treatment.

Doctor Kellogg suggests, quite rightly I think, that rheumatic infection was associated with, but independent of the dermatomyositis. There may be some relationship between scleroderma and dermatomyositis. Cases have been

reported where a transition appears to have taken place. This writer has observed a case of scleroderma associated with rheumatic heart disease. No relationship between the two seemed apparent.

✱

HIRAM E. MILLER, M.D. (384 Post Street, San Francisco).—Dermatomyositis is a comparatively rare disease, and it is always of value to report the findings in such unusual cases as this one. The prodromal symptoms in this woman were of very slow onset, extending over a period of eight years or more. She had marked contractures of her leg muscles; pigmentation gradually covered her entire body, but there was no history of an actual dermatitis. She had an associated valvular heart disease, with clubbing of the fingers. Streptococci were obtained by culture from a biopsy taken from the leg muscles. There are probably a number of diverse and only remotely related conditions classified under the symptom-complex of dermatomyositis.

I have observed several patients with this disease. They all have had a dermatitis on the upper face, eyelids and, in most instances, on the extremities. Many of them died due to paralysis of the visceral muscles generally of the respiratory tract. The dermatitis in most instances closely resembled disseminated lupus erythematosus. An associated leukopenia is also observed in this disease. In my experience, a leukopenia is generally found as is recorded in this case, and not a leukocytosis as is stated in the paragraph on symptoms.

I have seen various types of treatment used in this disease, but have not been convinced that any of them have materially changed the course of the disease. Some of the patients recovered and some of them died.

I do not believe that vaccination has played any part in causing the disease in this patient. I think it is unfortunate that this phase of the condition has been given such a prominent place in the conclusions.

## INSULIN SHOCK THERAPY IN DEMENTIA PRAECOX: A REPORT OF A SERIES OF CASES\*

By CLIFFORD W. MACK, M.D.

AND

B. O. BURCH, M.D.  
Livermore

DISCUSSION by J. M. Nielsen, M.D., Los Angeles; E.W. Mullen, M.D., Agnew; Samuel D. Ingham, M.D., Los Angeles.

**I**NTRODUCTION.—The treatment of dementia praecox by hypoglycemic shock, according to the method of Sakel, is largely empirical in character. The determination of its value can only be made by clinical application to a large number of cases over a period long enough to see the proportion of successes and failures. As the last four years have furnished much data, it is well for us to review the results and try to ascertain if this dramatic form of therapy merits a place in psychiatric practice.

## EUROPEAN REPORTS

The reports from European clinics are much larger than from those in this country. Recent literature indicates that about two thousand patients have been treated all over the world. The greater magnitude of the work abroad may be due to its earlier use there; but this also leads one to believe that it has been given wider application than in America. Sakel<sup>1</sup> first reported 104 cases completed in 1937, in which series there were 70.7 per cent

\* Read before the Neuropsychiatry Section of the California Medical Association at the sixty-seventh annual session, Pasadena, May 9-12, 1938.

recoveries. If to this figure is added those not having a full remission, but who were classed as fit to work, the total is 86.2 per cent. These were in the group of new cases under six months. The total percentage of recoveries in the series of 104 was 48 per cent, including both old and new cases. This is a startling recovery rate for a disease that has baffled psychiatrists for generations. A more recent article by Strecker,<sup>2</sup> including a report from the Müller Clinic in Switzerland, gives an analysis of 495 cases. The percentage of recoveries of those patients under one year was 57.2; under two years, 27.3; over two years, 11.3. The percentage of improved cases under one year was 22.2; under two years, 34.1; over two years, 32.2. These statistics, showing a recovery rate of 40.4 per cent for the entire series, are decidedly more modest than those just quoted.

#### AMERICAN STATISTICS

The American reports are not so extensive, but compare favorably with the European. The largest series comes from the Harlem Valley State Hospital,<sup>3</sup> in July, 1937, and comprises eighty-one cases. There were fifteen cases of a duration under two years, showing recovered and much improved, 66.66 per cent, improved 26.66 per cent; ten cases of two to four years, recovered and much improved, 40 per cent, improved 40 per cent; eight cases of four to six years, recovered and much improved, 37.5 per cent, improved 37.5 per cent; and thirteen cases of six years and over, recovered and much improved, 15.38 per cent, improved 61.51 per cent. It will be noted that there is a recovery rate of 44.4 per cent in the group as a whole if the much improved cases are included with the recoveries. The commonly accepted spontaneous remission rate is from 5 to 20 per cent.

#### REPORT OF CASES

The following nineteen completed cases are reported, out of a total of twenty-three treated.

CASE 1.—B. Age, 16. Some original mental defect. Duration, eleven months. Mental symptoms consisted of violent conduct, hysterical spells simulating fits. Later, in the course of the illness, the patient became apathetic, indifferent, and unproductive. Progressive mental deterioration. *Diagnosis:* Dementia praecox, hebephrenic form. *Treatment:* Total number, 93, with a maximum dose of 140 units. Four convulsions. *Result:* Slight improvement in conduct. Discharged unimproved.

CASE 2.—Bo. Age, 20. Normal youth, except somewhat retiring. Duration, one year. Mental symptoms consisted of delusions of poisoning, periods of extreme mental excitement, great pressure of activity, delusions of mistaken identity and auditory hallucinations. During the course of the illness these periods of excitement alternated with periods of quietude, unproductiveness, and a sad mood. *Diagnosis:* Dementia praecox, hebephrenic, with some features of manic-depressive psychosis. *Treatment:* Total number, 81, with maximum dose of 120 units. One convulsion. There was slight improvement, with diminution of cycles and hallucinations. *Result:* Unimproved.

CASE 3.—Ba. Age, 60. Normal social personality. Duration, four years. Delusions of persecution, despondency, fear of dirt infection and of contaminating other people. Suicidal ideas. Agitated and restless. Pronounced negativism. Physical examination negative. *Diagnosis:* De-

mentia praecox, paranoid. *Treatment:* Total of 6, with maximum dose of 60 units. The patient died, after receiving 40 units. Cause of death, on clinical data without autopsy, coronary sclerosis.

CASE 4.—T. Age, 40. Always timid, sensitive and overly conscientious. Duration, eighteen years. Symptoms of pronounced mental deterioration, following years of mental disease. Negativistic, unproductive. Mutters to himself and laughs sillily. Listless and apathetic; very untidy. *Diagnosis:* Dementia praecox, hebephrenic. *Treatment:* Total of 96, with maximum dose of 140 units. *Result:* Slight change in conduct, so that patient could engage more in occupations. Unimproved.

CASE 5.—McE. Age, 25. Shut-in type of personality. Duration, one month. Chief symptoms: Violent, impulsive conduct; delusions of persecution that he is to be electrocuted; that he is possessed of the devil. Homicidal threats. No hallucinations. *Diagnosis:* Dementia praecox, paranoid. *Treatment:* Total of 90, with maximum dose of 160 units; two convulsions. *Result:* Recovered. (A report after six months states that this patient is still well and working at his occupation.)

CASE 6.—To. Age, 20. Shut-in type of personality. Duration, nine months. Chief symptoms: Abnormal fear of death; depressed, anxious mood. Excitable and restless. Stereotyped conversation and conduct; mannerisms. *Diagnosis:* Dementia praecox, hebephrenic. *Treatment:* Total of 9. *Result:* Unimproved.

CASE 7.—MacL. Age, 34. College graduate. Normal personality. Duration, four years. Chief symptom: Delusions of persecution. Psychosis progressed slowly. Unable to work for three years because of delusional control and some neurasthenic complaints, with a mild degree of anemia. Outbreak of violent conduct and threats against the authorities caused his arrest and commitment. *Diagnosis:* Dementia praecox, paranoid. *Treatment:* Total of 189, consisting of two courses: the first one of ninety-three treatments, which brought about a remission lasting only two weeks; the second course, ninety-six, with the result that symptoms entirely disappeared. The patient is following normal conduct, but is still in the hospital. *Result:* Improved.

CASE 8.—W. Age, 23. College graduate. Unusually high intelligence—one of Terman's one thousand cases. Duration, two years. Chief symptoms: Inability to continue studies; delusions and suspicions about people; auditory hallucinations. Voices that came from former friends, one of whom kept her constantly hypnotized. Psychosis progressed, with evidence of deterioration. The patient became uncouth in manner and untidy. After some months, delusions changed to feelings of grandeur and ideas of royalty. *Diagnosis:* Dementia praecox, paranoid. *Treatment:* 114 doses, with maximum dose of 110 units. *Result:* Temporary improvement, but final result unimproved.

CASE 9.—F. Age, 25. Normal personality. Duration, one year. Chief symptom: Outbreak of violence because he could not conform to social usages. Arrested and taken to jail. After release he was unable to adjust himself. Psychosis progressed, with delusions of poisoning, and he eventually developed a state of stupor with complete negativism, in which condition he was brought to the hospital. *Diagnosis:* Dementia praecox, catatonic. *Treatment:* Total of 68, with maximum dose of 100 units. *Result:* Recovery. (A report five months later certifies that he is still well and following his former occupation.)

CASE 10.—J. Age, 33. Normal personality. Duration, five years. Chief symptoms: Delusions of poisoning. Violent spells. Homicidal, threatening to kill the family. Un-

regulated conduct, noisy, screaming, laughing silly. The psychosis progressed. Auditory hallucinations, interfering with daily conduct. Hallucinations became sexual in content. *Diagnosis:* Dementia praecox, paranoid. *Treatment:* Total number, 68, with maximum dose of 70 units. Three convulsions. The patient improved very much in conduct, hallucinations diminished but did not disappear. No violent spells. The patient was very sociable and able to engage in occupations and exert good self-control among other people. *Result:* Improved, although still in the hospital.

CASE 11.—S. Age, 22. College graduate. Normal personality. Duration, three months. Chief symptoms: Mental confusion. Religious delusions that the world was coming to an end; that certain people were possessed of the devil; that he had power to do miracles. State of great mental and physical excitement continued. Auditory, and possibly visual hallucinations. As the psychosis progressed he became very noisy and disturbing, requiring packs and seclusion. *Diagnosis:* Dementia praecox, hebephrenic. *Treatment:* Total of 38, with maximum dose of 65 units. Two convulsions. Improvement began during second week of treatment. *Result:* Recovered. (Six months after discharge, report indicates that he is very well, and socially adjusted.)

CASE 12.—Wh. Age, 40. Rather retiring personality. Duration, eleven years. Chief symptoms: Delusions of a sexual nature, that she was being assaulted, and persecuted by neighbors and officers. Belief that husband's business was being hampered by her enemies. Delusions about dirt and infection in the house, always washing her hands and cleaning. *Diagnosis:* Dementia praecox, paranoid. *Treatment:* Total of 85, with maximum dose of 60 units. *Result:* The patient improved steadily in conduct and emotional reactions. She became more interested and concerned about her daily life. Delusional content diminished gradually. No new delusions were formed, and she was willing to refrain from any reaction to delusional ideas. Discharged improved. (Follow-up report is satisfactory.)

CASE 13.—L. Age, 15. Rather above the average in intelligence. Duration, three years. Chief symptoms: Loss of application in school. Disturbing dreams. Mental confusion. Auditory hallucinations. Religious delusions. Psychosis progressed, and while in the hospital she expressed many fantastic ideas, such as that she was pregnant, that voices accused her of wrongdoing. Negativistic. Tube-fed. *Diagnosis:* Dementia praecox, hebephrenic. *Treatment:* Total of 96, with a maximum dose of 80 units. Nine convulsions. *Result:* Unimproved.

CASE 14.—Tr. Age, 34. Rather quiet, retiring personality. Overly conscientious. Duration, five months. Chief symptoms: Painful depression. Fear that he had made an error and would lose his job. One month before admission he became very delusional and was placed under complete rest treatment at home. Thought that the company had spies about the house who were going to put him in jail. The psychosis progressed. He would not talk, sleep or eat. There was a severe excited spell, during which he ran about the house in terror, wanted to call the police, and jump out of the window. *Diagnosis:* Manic-depressive psychosis, depressed. *Treatment:* Total of 68 injections, with maximum dose of 140 units. Improvement began one month after treatment started. Symptoms gradually disappeared and the patient became more cheerful and cooperative. *Result:* Recovered. (Three months later the patient was reported well and has since been working at his former occupation.)

CASE 15.—K. Age, 25. College graduate. Very sensitive and seclusive type of personality. Duration, two months. Chief symptoms: Despondency, fear. Delusions that he had caused trouble in the plant and would be discharged. Afraid he would be shot, and attempted to disguise himself. Talked of suicide. Delusion that his reputation had been ruined by certain stories circulated about him in

regard to sexual affairs. Believed his presence would injure everyone in his surroundings. *Diagnosis:* Manic-depressive, depressed. *Treatment:* 86 injections, with maximum dose of 200 units. Three convulsions. Improvement began after three weeks. He became more responsive in conversation, and applied himself to tasks and recreation. Psychomotor retardation, depression and delusions remained in evidence, but these gradually diminished and were the last to disappear after return of normal mood. *Result:* Recovered.

CASE 16.—R. Age, 27. Normal personality. Mild depression seven years previously. Duration, one and one-half months. Chief symptoms: Depression. Lack of interest in surroundings. Psychomotor retardation. Hypochondriacal delusions. Psychosis progressed. He became greatly disturbed emotionally and could not cooperate. *Diagnosis:* Manic-depressive, depressed. *Treatment:* Total of 45 injections, with maximum dose of 160 units. He improved gradually each week. At the end of the seventh week he was very much better, and appeared to his wife and others to be entirely well, except for a feeling of inadequacy and worry. *Result:* Recovered. (Three months later patient was normal and able to carry on his business affairs.)

CASE 17.—Ri. Age, 31. College graduate. Inclined to neurasthenic complaints. Duration, nine months. There had been a mental condition two years before, during which he was depressed. Chief symptoms: Confused, restless, and negativistic. Letters showed verberation. After a few weeks he became mute. A few spells of extreme excitement and violence. No change during a period of five months before treatment was instituted, except increasing stupor. *Diagnosis:* Dementia praecox, catatonic. *Treatment:* Total of 94, with maximum dose of 120 units. One week after treatment began the patient became less negativistic. In the second week voluntary activity predominated, and after six weeks he engaged normally in occupational and recreational pastimes. Improvement was gradual, with blocking in conversation the last symptom to disappear, but at the end of twelve weeks he was definitely convalescent. *Result:* Recovered.

CASE 18.—Wi. Age, 17. Slow in school. Industrious, but not sociable. Duration, seven months. Chief symptoms: Ill-tempered in school and could not study. He developed delusions that people were making fun of him. Later he was indolent and impulsive, and laughed silly. Active hallucinations appeared, also delusions of poisoning. Committed to a state hospital. *Diagnosis:* Dementia praecox. *Treatment:* Total of 84, with maximum dose of 130 units. During a period of six weeks there was little change in the patient's behavior, but then he became more interested in activities. The acute symptoms left him, and he showed steady improvement. *Result:* Recovered.

CASE 19. Le. Age, 19. Normal personality. Duration, twenty months. Chief symptoms: State of depression and fear; later, pronounced mental confusion and violent conduct. Untidy habits, destructiveness, inability to feed herself or care for her person. Mental condition grew worse up to time of treatment. *Diagnosis:* Dementia praecox, catatonic type, allied to manic-depressive psychosis. *Treatment:* Total of 72, with maximum dose of 150 units. Two convulsions. Improvement was first noted at the end of the second week, with change in the patient's conduct. She became quieter and more easily controlled, and at the end of the seventh week mental condition began to clear and symptoms entirely disappeared. *Result:* Improved.

#### RESULTS

The results\* of treatment of these cases can be summarized as follows: Recovered, 8 (42.1 per

\* Thanks are due Dr. B. O. Burch, who personally managed the insulin treatments, and the other members of the medical staff of the Livermore Sanitarium for their assistance in the examinations and reports.

cent); improved, 4 (21.0 per cent); unimproved, 7 (36.9 per cent).

#### ANALYSIS OF CASES

Our series includes some very old cases—one as long as eighteen years, and another ten years; but they were included in the group because the families were very anxious to have them treated. If we classify the cases in accordance with the duration of the psychosis, those under two years give a recovery percentage of 61.5. The designation "recovered" in our classification means the disappearance of symptoms, return of insight, and ability to resume the former mode of life. "Improved" means those patients whose symptoms have not entirely ceased, who lack true insight but are able to make a fair social adjustment.

#### RELAPSES

The recurrences in our series are only two, and these were during the course of treatment. In Case 7, after the first twelve weeks of treatment the patient was symptom-free, but after two weeks there was a relapse, so his treatment was immediately resumed and has been satisfactorily concluded. In Case 19, the patient had a distinct remission at the end of six weeks, and for a few days was entirely well; but then she relapsed over a week-end. This we thought might have been due to the fact that she did not receive the usual dose of insulin. Treatment in this case was continued, and there is improvement, although the case is not yet completed. Among the patients who have been discharged from the Sanitarium, there have been no relapses; and one case in particular has been doing well for a period of ten months. The reports from the European clinics, as summarized by Strecker,<sup>4</sup> give 23, 15, and 14 per cent, while the large group of cases of Müller gives only 6.5 per cent. In our series it is to be noted that two of the cases had a very long course of treatment—189 injections in Case 7, which improved; 114 in Case 8, with possible improvement; and no harmful results in either case.

#### EFFECT ON CENTRAL NERVOUS SYSTEM

The possibility of damage to the central nervous system by a treatment that causes, during coma, definite signs of cortical irritation, such as unconsciousness, convulsions, positive Babinski, etc., should be considered. In our cases, follow-up neurological examinations are negative, even in those cases having the largest number of treatments, such as Case 7 with 189 treatments. Another patient, Case 2, had an atypical Babinski, but no other signs of neural injury. Also, none of the patients in the unimproved group developed a more serious psychotic state, but were to some extent better.

#### DANGERS OF TREATMENT

The hazards of such a radical form of treatment must be recognized because of the possibility of death or permanent physical or mental injury. The one fatality in our series was probably due to insulin sensitiveness, causing coronary thrombosis. Sakel, in his early series of 104 cases, reports the treatment of three cases over sixty, one of whom

showed cardiac complications, but treatment was resumed. Dr. I. C. Brill of Portland, in a personal communication, furnished the following extract, quoting from a recent book by Arthur M. Fishburg on heart failure: "It has been seen that insulin hypoglycemia increases the work of the heart and that the injection of insulin may be followed in individuals with coronary arteriosclerosis by anginal pain and perhaps coronary thrombosis."

The extensive application of hypoglycemia cannot be accomplished without the coöperation of the public, relatives, and medical profession. It behooves us, then, to select our patients with the utmost care, excluding those who are poor physical risks or who are so far deteriorated as to mitigate against recovery, in order not to discredit this form of therapy. Therefore, it may be well to limit the cases to those under the age of forty.

#### FURTHER DANGERS

The dangers during shock from aspiration of mucus, convulsions, or lack of time to terminate coma, are not very grave. There is, undoubtedly, a wide margin between deep coma and death, as illustrated by the case mentioned in an article by Cameron and Hoskins, where a delayed reaction was unrecognized and the patient lived forty-eight hours. Also, the margin of safety between reversible and irreversible cellular changes in the brain is sufficient to give considerable latitude. Moersch and Kernohan,<sup>5</sup> reporting on the autopsy of three patients dying of hypoglycemia, give the following: "There were acute degenerative changes in the brain cells, but it appeared that early acute degeneration could have been restored to normalcy and have assumed their normal function under favorable circumstances." The death rate in Europe of a large series of cases has only been one-half of one per cent.

#### DIFFERENTIAL DIAGNOSIS

The cases in our series are not all dementia praecox, as some were diagnosed by the staff as manic-depressive psychoses. This brings up the question of selection of patients. As we lack exact differential diagnostic methods, such as the laboratory tests in paresis, the limitation of hypoglycemic shock to dementia praecox is impracticable. In view of the uncertainties of diagnosis, it would seem that all functional psychoses would be suitable for hypoglycemic shock treatment, possibly with the exception of the manic-phase of the manic-depressive psychoses. Patients with the depressed phase might well be included, as they are so often confused with dementia praecox patients. The treatment is not a specific for dementia praecox, so a wider selection is justified, and probably definitely indicated. There is a possibility that the manic-depressive psychoses would have less predilection to relapse if they, too, were treated by hypoglycemia.

#### ACCESSORY TREATMENTS

The many other therapeutic aids ordinarily in use should not be denied our insulin patients. They require a well-balanced daily program, including recreation, exercise, and occupational therapy. These need to be prescribed in proper dosage and

regulated in accordance with the rate of return of normal psychic functioning and emotional balance. It is our experience that psychotherapy—such as persuasion, suggestion, and therapeutic talks—is beneficial, but energetic probing of the mind must be avoided. This should be reserved until the patient is well advanced in a stage of convalescence, and not applied in the early days of treatment when the mental processes are only partially under conscious control.

#### THEORETICAL CONSIDERATIONS

As to the theoretical explanation of the therapeutic benefits, we have very little to offer. It may be that we are entering upon a new era in the treatment of mental patients, using the physiological approach, as pointed out in a paper by C. W. Mack<sup>6</sup> before this Society in 1935. Stimulation of brain cellular activity by the hypoglycemic state might well be the explanation of the improvement obtained. The only practical point in this connection to be seen in our series is that all recovered cases showed a gain in weight. This may mean an improvement in brain nutrition, due to an increase in the power of neuron tissue to utilize sugar.

#### CONCLUSIONS

The final place in psychiatry of hypoglycemic-shock therapy will be determined in the years to come after the extent of recurrence has been studied. It may be that the ultimate result will show a more severe deteriorative process in patients with a malignant psychosis. A survey of the method to date, however, leads to the conclusion that it is a most fruitful form of treatment, and far surpasses anything at our command for the functional psychoses. The thought arises that hypoglycemic shock might well be applied to all new cases of this type received for treatment, either in private or public practice. The increased recovery rate in comparison with conservative programs of the past outweighs the risks, difficulties and expense. The state hospitals have such a large influx of patients that a great burden would fall upon the medical organizations of these institutions if all new patients were treated. The economic saving, however, by decreasing the total number of hospital days, would soon recompense the state for any additional expense in the acute services. The need for early treatment is apparent to all who have been engaged in this work, as the best results are obtained in the first few months of the illness.

#### SUMMARY

1. A review of the literature reveals a recovery rate of 40 to 50 per cent of patients treated with hypoglycemic shock.
2. The largest American report available compares favorably with the European statistics.
3. A series of nineteen cases is reported by the author, with 42.1 per cent recoveries.
4. The relapses in Europe are 6.5 to 23 per cent.
5. The treatment should not be limited to dementia praecox, but deserves wide application in all early functional psychoses.

The Livermore Sanitarium,  
954 South L Street.

#### REFERENCES

1. Wilson, Isabel G. H.: A Study of Hypoglycemic Shock Treatment in Schizophrenia, Board of Control (London) Report, 1937.
2. Strecker, H. Pullar: *Lancet*, 7:373 (Feb. 12), 1938.
3. Harlem Valley State Hospital Report (June 30), 1937.
4. Strecker, H. Pullar: *Lancet*, 7:373 (Feb. 12), 1938.
5. Moersch & Kernohan, Rochester, Minnesota: *Arch. Neurol. and Psychiat.*, p. 242 (Feb.), 1938.
6. Mack, C. W.: *Calif. and West. Med.*, Vol. 41, No. 1 (July), 1934.

#### DISCUSSION

J. M. NIELSEN, M.D. (727 West Seventh Street, Los Angeles).—Doctor Mack's paper is timely and well chosen. It is evident, from the number of treatments given to each patient, that he treats thoroughly. I am not in position to discuss the efficacy of the treatment in conditions other than schizophrenia, as we have confined our work to that group. Our group of three doctors has given thirty-six courses of insulin shock treatment to thirty patients (fifty shocks per treatment) and this means fewer shocks to each than Doctor Mack has given. On the other hand, we have given considerably larger single doses, as many have received 200 units daily, and some a great deal more, one 450 units per dose for a time.

As to complications, I note that Doctor Mack has had one death. This, however, was in a patient sixty years of age, so that is not strange. Our series of thirty cases includes only four over 36 years of age—39, 43, 48, and 49, respectively. We were more careful with these four than usual, and all survived; but there was no therapeutic benefit, except improvement in one of them. On the other hand, we have had considerable trouble with pulmonary complications. Three of our patients have had severe pulmonary edema and one, pulmonary embolus. The complication was very nearly fatal in each case. Those complications are our greatest fear; and a report of them will appear in the *Journal of the American Medical Association*. Prolonged coma, from which it was impossible to restore our patients for many hours (as long as thirty-three hours), has also occurred quite a number of times, but this is not dangerous unless simultaneous pulmonary edema ensues. So far we have had no fatality, but we may have one at any time.

I have arranged our therapeutic statistics to be comparable with those of Doctor Mack. Of our cases of schizophrenia (thirty cases) there were eighteen recent ones with recovery in twelve, improvement in four, and no results in two. We have treated twelve patients with disease of long standing (old cases), in which we did not obtain recovery in a single one, but improvement in six.

We think the method has come to stay as a permanent part of a psychiatrist's armamentarium, and we recommend it in the acute cases, especially those in young persons. In cases of long standing (more than a year), we tell the relatives that the percentage of recovery is very low, and hardly worth while unless the situation is desperate. We promise no results to anyone and we stress the dangers. We demand that the family take its part of the responsibility in any unfavorable outcome. The family must similarly be a unit in meeting the hazards emotionally. We assume the attitude that each treatment is very much like a surgical operation, and one must be prepared for all emergencies.

✱

E. W. MULLEN, M.D. (Agnew State Hospital, Agnew). I have enjoyed Doctor Mack's paper on insulin shock therapy in dementia praecox very much. This is a subject which is receiving attention in the medical profession, and especially in that part of the profession which practices psychiatry.

Doctor Mack's approach is scientific and thorough. His conclusions are well founded. His findings indicate that, while a certain percentage of mental cases recover under the insulin shock treatment, some only improve and some do not improve. I think he might have added that in some cases their condition becomes more aggravated. Therefore, the treatment is not a specific. However, any treatment that gives relief in some cases should be given our honest and earnest attention.

Perhaps the name "insulin shock" is not the best name that we could have used in this treatment. It is not a true condition of shock as we see in surgery, etc.; it is more of a toxic condition. Perhaps it is really more of a mental shock than a physical. This, however, is not important if you get good results.

✱

SAMUEL D. INGHAM, M.D. (727 West Seventh Street, Los Angeles).—The authors have given us a practical review of the status of insulin shock therapy, as reported from various clinics, as well as their own results. Their experience has been in close accord with most of the work reported, and indicates that the insulin treatment of dementia praecox is the most efficient means of treating this condition.

It is to be emphasized that success of this treatment depends largely upon the technique of its administration and, therefore, upon the experience and judgment of those who are using it. The best results are obtained when insulin shock is carried to the ultimate degree consistent with a reasonable margin of safety. It is, therefore, important to be on the alert for danger symptoms and to be ready with emergency treatment. No satisfactory theory has been offered to explain benefits derived from the insulin treatment of schizophrenia, although several have been proposed.

It is of interest to note the marked improvement in the physical condition of patients which occurs simultaneously with the improvement of the mental condition. This includes a gain in weight, improved digestion, better circulation and vasomotor stability, as well as general improvement in vegetative functions.

I think that all who have had a comprehensive experience with this form of treatment can subscribe to the conclusions of the authors expressed in their summary.

### CONGENITAL RENAL ANOMALIES\*

WITH SPECIAL REFERENCE TO HORSESHOE KIDNEY

By CARL F. RUSCHE, M.D.

AND

SAMUEL K. BACON, M.D.  
Hollywood

DISCUSSION by Robert V. Day, M.D., Los Angeles; Benjamin H. Hager, M.D., Los Angeles; William E. Stevens, M.D., San Francisco.

**D**DOUBLE kidneys, reduplication of pelves and ureters are the most frequent anomalies of the upper urinary tract. Next in frequency is horseshoe kidney. In general, this interesting renal mass may be defined as a symmetrical, semicircular fusion of the two kidneys across the vertebral column by a bridge or isthmus which, even without concomitant disease or gross pathology, produces a clinical syndrome called horseshoe kidney disease; an entity due to pressure, which is characterized by indefinite epigastric or umbilical pain, intestinal and urinary stagnation.

#### CLASSIFICATION

In order to institute better clinical and surgical management of horseshoe kidney, Gerard, and later Gutierrez, have classified the subject into symmetric and asymmetric groups. The symmetric division refers to fusion by a bridge of renal or fibrous tissue of the two organs at the lower poles with concavity upward, or fusion of the upper poles with concavity downward. This organ rests astride the vertebral column. The asymmetric type refers

to irregularities in shape, location, and position. This entity is less common and the individual types accordingly are termed unilateral fused kidney, L-shaped renal fusion, fusion en glatte or disc form, sigmoid fusion, fusion en masse, and fusion without form.

#### INCIDENCE

With the advent of urography, the incidence of this anomaly has markedly increased. Various averages from the statistics of several necropsy surgeons before the introduction of pyelography, fix the rate to about 1:1000; however, with this method of urologic diagnosis the frequency has been increased to about 1:400, and even more recently the ratio is reported to be 1:200 pyelograms. In 68,989 necropsies reported by Carlier and Gerard, there were eighty horseshoe kidneys, or 1:862; Kuster, 1:1100; Davidsohn, 1:1000; Judd, Braasch and Scholl, 17:2424 operations on the kidney; Bettez, 1:715; Guizzetti and Pariset, 1:1142; Marynski, 1:683; Naumann, 1:600; Jeck, 1:643; Thompson, 19:12,888 (1:671); Motzfield, 92:73,489 (1:710); Lipshutz and Hoffman, 105:70,502 (1:671); Legueu and Papin, 1:600.

#### EARLY LITERATURE

In the annals of medical history, from the ancient down to modern times, one can find a fascinating story of this subject. First, the ancient anatomist and post-mortem surgeon reported this "monstrosity"; then, with the commencement of kidney surgery late in the nineteenth century, the anomaly was discovered during abdominal exploration for tumor; and, finally, this history continues on to an era of clinical diagnosis by physical examination, and more recently, to conclusive diagnosis by retrograde or intravenous urography.

Early in embryonic life it is an established fact the pronephros, mesonephros, and metanephros arise from both entoderm and mesoderm. The pronephros degenerates early and is considered rudimentary in character; the mesonephros is important during embryonic life, and its remnants enter into formation of the genital tract; and, lastly, the metanephros establishes itself as the permanent kidney. The renal buds appear behind and at the lower end of the mesonephros or Wolffian duct during the fourth week and progressively change their shape and position; hence, the opportunity for anomalous development between the fifth and seventh week. These anlagen arise on a level with the second sacral vertebra below the umbilical arteries and aortic bifurcation, and migrate upward. This vascular mechanical obstruction, according to several writers, may impede the ascent and rotation and permit fusion to take place.

#### SYMMETRICAL FORM

The most common or symmetrical form of horseshoe kidney is a semicircular mass of renal substance whose concavity is upward, and united at the lower poles (90 to 95 per cent) by a bridge or isthmus of renal or fibrous tissue which crosses the spinal column. The renal parenchyma usually retains some marks of fetal lobulation, and the right and left halves are seldom exact in position

\* Read before the Urology Section of the California Medical Association at the sixty-seventh annual session, Pasadena, May 9-12, 1938.

or shape. The asymmetrical organ presents a remarkable tendency to dystopia.

The isthmus connecting the lower poles is in close apposition to the surrounding structures, namely, (a) posteriorly, the inferior vena cava, abdominal aorta, solar plexus and vasovisceral branches, the great lymphatic reservoir, and the spine; (b) anteriorly, the parietal peritoneum and intra-abdominal viscera. Usually the bridge is low at the umbilical level, the aortic bifurcation, or level of the fourth to fifth lumbar vertebrae.

The pelves, usually two in number, are generally anterior to the blood supply, incompletely rotated, and extend on to multiform calices in the reverse position. The latter frequently cross a portion of the spine. The ureters cross the isthmus and connect each pelvis to the bladder. If fusion of the upper poles (5 to 10 per cent) is present, the ureters usually arise from the upper portion of the kidney mass and do not cross the isthmus.

In collected studies from the literature, from four to six renal arteries supply and support the median and two lateral sections; however, anomalies predominate. The solar plexus, splanchnic nerve, sympathetic and parasympathetic nerves, phrenic nerves, and other regional interanastomoses enervate the kidney. The lymphatics are multiple and run parallel to the retroperitoneal vessels. In close proximity is the cisternal chyli.

#### DIAGNOSIS

In clinical practice the diagnosis of horseshoe kidney is made usually after the urine has become infected. Pressure of the isthmus on the adjacent structures produces extensive nervous and circulatory phenomena. Then stasis in the renal pelves, due to ureteropelvic juncture obstruction, high ureteral implantation, and structural dependency, initiates the sequelae of infection.

Horseshoe kidneys undergo the same pathologic lesions as normal kidneys; however, because of the predominating factor of stasis, hydronephrosis, pyelonephritis, pyonephrosis, and calculous disease are common sequelae. Cases of tuberculosis, neoplasm (parenchymal or pelvic), polycystic disease, and chronic diffuse nephritis, have been reported.

The clinical history and physical examination are seldom sufficiently significant to suggest the possibility of a tentative diagnosis of horseshoe kidney. Gutierrez's horseshoe kidney syndrome, consisting of umbilical or epigastric pain, chronic constipation, and urinary findings, is worthy of emphasis by repetition. In the thin patient an abdominal mass and isthmus may be palpated. Israel and others have stated that "the surgeon must bear in mind the possibility of such a congenital kidney malformation." Symptoms, signs, and findings such as, or of, renal colic, nephritis, pyelonephritis, uremia, and chronic cystitis, are to be considered.

The conclusive diagnosis of horseshoe kidney has been reduced to simple mechanical technique since the era of cystoscopy and urography. Routine urologic study, consisting of medical history, physical examination, urinalysis, blood chemistry, phenolsulphonephthalein test, roentgenography, cystoscopy, ureteral catheterization, differential renal function tests with phenolsulphonephthalein, and

retrograde bilateral pyelography or intravenous urography without cystoscopy, adequately provides a complete diagnostic armamentarium. The horseshoe kidney pyelographic triangle of Gutierrez is fascinating and seems to be pathognomonic; at least practical in its application.

Certain roentgenological and pyelographic findings, such as delineation of renal poles of both kidneys, close proximity to vertebral column, obliteration of psoas outline, renal calculi in transverse position near midline, "flower vase" figure of ureteral catheters, inversion and rotation of pelves, inversion of lower calices and directed medialward, bizarre pelves near spine, "bottle neck" ureteropelvic appearance, "minimum lower angle of horseshoe kidney triangle," if critically employed should establish conclusively the diagnosis of this anomaly.

#### TREATMENT

The treatment of horseshoe kidney varies with each individual case, and is particularly dependent upon the existing pathologic lesions. Indwelling ureteral catheter drainage is necessary in the presence of acute manifestations. Intermittent drainage may be sufficient as a temporary procedure in chronic urinary stasis. In infected hydronephrosis, pyonephrosis, tuberculosis, or neoplasm, involving half of the renal mass and in the presence of a normal half, resection (heminephrectomy) is a rational procedure. The surgical technique is comparable to that carried out in similar pathologic processes in a normally formed kidney. Transperitoneal anterior as well as retroperitoneal lateral and anterolateral approaches have been recommended and practiced. The transperitoneal anterior incision simplifies the operation. During surgery in infected cases, care should be exercised to avoid peritoneal contamination, and with tight peritoneal closure a retroperitoneal stab wound and drain are recommended. Conservation of renal substance is even more axiomatic in dealing with this congenital anatomopathologic entity. Pelviolithotomy should be stressed more seriously than resection, because of the potential danger of subsequent disease of the opposite parenchyma or pelvis. The literature attests to the rational of symphysiotomy and nephropexy in "chronic cases of horseshoe kidney disease with clinical symptoms."

To demonstrate several of the above ideas, which are in no way original with us, we give below the clinical history of one recent case of horseshoe kidney which we personally observed, and our surgical technique will be shown in motion pictures in color.

#### REPORT OF CASE

*History.*—A white female, aged 56 years, was admitted to the hospital on May 10, 1937. She complained of blood in the urine, dull pain and a sensation of heaviness in the upper and right side of the abdomen, extending through to the back, especially for the past four months. The patient stated that passage of the uniformly bloody specimen of urine was without bladder discomfort. The familial and early personal history were not relevant.

*Examination.*—The examination revealed a very well-nourished female, who was alert, cooperative, and in no acute distress. Temperature was 98.6 degrees; pulse 78. The abdomen was characterized by a hard, slightly moveable mass about the size of a large grapefruit, located in the epigastrium, but more prominent just to the right of the



Fig. 1

Fig. 2

Fig. 3

Fig. 1.—Antero-posterior roentgenogram of the kidney, ureter, and bladder area, showing a large calculus near the spine and indistinct delineation of the kidney poles.

Fig. 2.—Bilateral pyelograms showing calculus in right kidney pelvis; left pelvic dilatation although incompletely filled; pelvis near spine, and improperly rotated; "flower vase" figure of ureteral catheters; 22 degree "minimum lower angle of horseshoe kidney triangle."

Fig. 3.—Postoperative (11 months) bilateral pyelograms showing satisfactory anomalous kidney pelvis and enormously dilated left kidney pelvis.

midline. A very hard, protruding irregularity (calculi), particularly noticeable upon inspection and palpation, was localized to the right of and somewhat above the umbilicus.

The urine was suggestively bloody grossly and contained many red blood cells, pus cells, and Gram-positive cocci in clumps. Blood non-protein nitrogen, 25 milligrams per 100 cubic centimeters. One cubic centimeter of phenolsulphonphthalein given intravenously appeared in three and three-quarter minutes; 45 per cent and 10 per cent recovered in the first and second thirty-minute periods,

respectively. Blood Wassermann and Kahn tests were reported negative. Hemoglobin, 85 per cent; red blood cells, 5,250,000; white blood cells, 9,600; 69 per cent polymorphonuclear leukocytes.

Kidney, ureter, and bladder roentgenogram (Figure 1) presented a large staghorn calculus near the spine, on the right side at the level of the third and fourth lumbar vertebrae. Several small opacities were reported in the corresponding area on the opposite side. The renal silhouettes were indistinct; however, the lateral borders of a mass of tissue seemed to be closer than normal to the midline.

Cystoscopic examination presented evidence of a mild cystitis. The ureters were readily catheterized and specimens of urine obtained from the renal pelvis showed the following: Right—many pus cells and Gram-positive cocci in clumps; left—few pus cells and Gram-positive cocci. Differential renal function test, using one cubic centimeter of phenolsulphonphthalein intravenously showed: Right—appearance time eight minutes, 5 per cent excreted in twenty minutes; left—appearance time five minutes, 15 per cent excreted in twenty minutes.

Other roentgenograms, including bilateral pyelograms (Figure 2), disclosed the following findings: (a) Large right staghorn renal calculus near the vertebral column; (b) small densities (?) in the corresponding area of the opposite side; (c) "flower vase" figure of the ureteral catheters; (d) inversion and rotation of bizarre renal pelvis; (e) inversion of lower calices directed medialward; (f) bilateral pelvic dilatation, especially the left; (g) "bottle neck" ureteral position; and (h) 22 degree lower angle of horseshoe kidney triangle. The diagnosis of horseshoe kidney with calculous disease was definitely established. Surgical removal of the calculi in the right renal pelvis was recommended and accepted.

**Operation.**—(May 25, 1937, recorded in motion pictures in color.) Under inhalation anesthesia, an incision was made parallel to and one and one-half inches to the right of the abdominal midline, commencing high in the right epigastric area and extending a few inches below the umbilicus. After opening the peritoneum the intra-abdominal contents were readily displaced to expose the horseshoe kidney. Incidentally, a 2.5 centimeter calculus was discovered in, but not removed from, the gall-bladder. The posterior peritoneum was incised longitudinally and the anomalous kidney, particularly its right half and isthmus, was exposed. Fusion of the upper poles was readily discernible. A moderately dilated, highly implanted right ureter and thickened, distended anterior pelvis were found. After opening the renal pelvis several large faceted calculi, forming a complete silhouette of the pelvis, were removed



Fig. 4.—Surgical specimen, staghorn faceted calculus reassembled.

(Figure 4). Due to the thickness of the pelvic wall, it was possible to make a substantial repair. A Penrose drain was directed retroperitoneally to the costo-iliac space and retrieved externally through a small stab wound. Each peritoneal incision was closed tightly without drainage, and the remainder of the abdominal wall was repaired with chromic catgut and skin dermal sutures.

**Postoperative Course.**—At no time did the temperature exceed 100.4 degrees, or the pulse 100 per minute. These were normal on the fifth day. The abdominal wound healed by primary union and only a slight amount of serous drainage came from the stab wound. The abdomen remained undistended and peristalsis was active. The patient was discharged from the hospital on the twenty-second, post-operative day, ambulatory and apparently in good health.

Unfortunately, this patient did not keep her clinic appointment and was not examined until January 1, 1938 (seven months later). At that time she complained of severe aching in the left abdomen and costo-iliac space. Examination disclosed the following: Well-healed surgical scars; tenderness in left abdomen and costo-iliac space. Temperature 98.6; pulse 80; respiration 20. Bladder urine: many pus cells and Gram-negative bacilli. Phenolsulphonethalein test: Appearance time four minutes, 50 per cent first half-hour, 15 per cent second half-hour. Blood non-protein nitrogen, 23 milligrams; kidney, ureter, and bladder roentgenograms negative for calculi. Cystoscopic study, ureteral catheterization, and bilateral pyelography presented mild cystitis, large irregular, left hydronephrosis, and sharply defined minor calices of the right pelvis. Urine from the right pelvis was negative for pus and bacteria; however, the left one contained many pus cells and myriads of Gram-negative bacilli. Phenolsulphonethalein, one cubic centimeter intravenously, appeared in 5 minutes and 11 minutes from the right and left pelvis, respectively, and the right excreted 22 per cent in 20 minutes; the left 2½ per cent. This study substantiated a diagnosis of left infected hydronephrosis. The patient responded with left ureteral dilatation and lavage of the kidney pelvis.

Again the patient was discharged from the hospital; however, one of us (S. K. B.) recently (April 14, 1938), subjected her to another complete kidney study. The essential points of interest are: No demonstrable urinary calculi; only a trace of function from the left pelvis; right pelvic urine without pus or bacteria; left, "loaded" with pus and Gram-negative bacilli and, according to the pyelogram, consistent with a far-advanced hydronephrosis (Figure 3). At this writing no further treatment has been instituted, since the patient has established residence in a distant rural community.

#### CONCLUSIONS

1. A case of horseshoe kidney (fusion of the upper poles) with calculous disease is reported; its clinical history given and the surgical treatment (transperitoneal pelviolithotomy) recorded through motion picture in color.
2. Urinary stasis, due to anomalous pelves and ureteropelvic juncture obstruction, is the main causative factor of associated pathology.
3. Roentgenographic procedures, especially bilateral pyelography, offer a conclusive diagnosis.
4. Surgical technique is comparable to that carried out in similar pathologic processes in a normally formed kidney. We, in this instance, chose the transperitoneal approach.
5. Conservation of kidney substance is even more axiomatic in dealing surgically with this congenital entity because of the potential danger of subsequent disease of the corresponding parenchyma and pelvis.

1680 North Vine Street.

#### DISCUSSION

ROBERT V. DAY, M.D. (1911 Wilshire Boulevard, Los Angeles).—With the advent of excretion urography, fewer cases of horseshoe kidney are overlooked—as stated by the authors. But even greater emphasis should be placed on

the careful study and correct interpretation of urograms obtained both by the intravenous and retrograde methods. The clinical syndrome in itself is highly suggestive, and calls for adequate urologic investigation. In their modesty, and apparent attempt not to appear dogmatic, I fear the authors have not sufficiently stressed these points, although the case history shows how painstakingly all these were carried out. Excretion urography is of more diagnostic import in horseshoe than in other forms of upper urinary-tract anomalies, for the reason that in so many of the other anomalies of the kidney and ureter one segment is apt to be entirely functionless and no radio-opaque agent is excreted in this segment.

At this point it might not be amiss to state that when one is too eager to discover rare anomalies he is apt never to find them. But if we strive with wide-open minds to make correct and total urologic diagnosis in each and every case as they are presented—simply assaying the patient for whatever pathologic condition, lesion or disease that he may have—the rare anomalies will seldom be overlooked. This does not mean, however, that we should carry out routine major urologic diagnostic procedures which the clinical history, subjective symptoms and simple subjective findings do not warrant. Individualizing of cases, and their careful study, supply the clues which indicate the kind and extent of urologic investigation that should be carried out.

The authors' case is an interesting one from several standpoints. First of all, the fusion was at the upper pole—quite rare.

From the clinical standpoint, one is bound to note the wise conservativeness of the authors in the management of this case. Moreover, the practical results attest this. Each case is apt to present a specific problem, and perhaps their next case of horseshoe kidney would call for a quite different surgical procedure, such as, for example, division of the isthmus and unilateral nephropexy.

I wish to commend the authors on their clear, succinct presentation of a rare and interesting case history, and their sound judgment in its management.

✱

BENJAMIN H. HAGER, M.D. (1136 West Sixth Street, Los Angeles).—Doctors Rusche and Bacon have presented a most unusual case of congenital anomaly in which a huge stone could be readily palpated through the abdominal wall. This unquestionably was the factor which decided the transperitoneal approach, a very courageous one in the presence of kidney infection. It has been established that horseshoe kidneys, in the absence of pathology, often give rise to a characteristic syndrome. This anomaly likewise is prone to develop symptoms arising from interference with urinary drainage—hydronephrosis, stone and infection being rather common complications. More lasting benefits are apt to follow surgery if attention to stasis is instituted. I have been very much impressed with the teachings and results of Doctor Foley of St. Paul, who makes it a practice, when feasible, to sever the communicating isthmus and perform a nephropexy at one sitting. This is followed, at a later date, by nephropexy of the remaining half. His records show an enviable result from the standpoint of complete relief of symptoms.

✱

WILLIAM E. STEVENS, M.D. (490 Post Street, San Francisco).—In reviewing the literature some years ago I found that, in the combined reports of 148,329 autopsies, horseshoe kidneys were present in 198 or once in 749 cases. As Doctors Rusche and Bacon have stated, they are found more often clinically since the advent of pyelography.

In the horseshoe kidneys that have come under my observation the most frequent symptom has been pain or discomfort in the abdomen, usually increased by exercise and relieved by rest in bed. A smooth, apparently oval mass was occasionally detected on palpation. The isthmus, unless composed of fibrous tissue, will often be more clearly outlined following excretory rather than by retrograde pyelography. Concomitant abnormalities of the genital organs are common, and horseshoe kidneys are not infrequently confused with lesions of the pelvic organs in the female. Pyelography is always indicated in the presence of an abdominal or pelvic mass of uncertain origin.

I wish to present brief histories and lantern slides of three cases:

Case 1. A young married woman complained of pain in the right groin (worse during menstruation), frequent urination and a sensation as if "something was pressing on the bladder." The characteristic pain was reproduced during vaginal palpation. The urine was negative. Pyeloureterography revealed a horseshoe kidney, and it was thought her symptoms were partly due to this anomaly. These disappeared, however, following the removal of infected tubes and a cystic right ovary. Many horseshoe kidneys exist without symptoms. The urine was negative in two of these cases I am reporting.

Case 2. A married woman, sixty-eight years of age, complained of a burning pain in the entire abdomen and frequent urination. Her urine contained numerous pus cells. Both pelvic and urinary-tract pathology were suspected. Pyelography revealed a horseshoe kidney. The isthmus is unusually well outlined in this case. The patient refused further investigation.

Case 3. Although previously reported, I am again presenting the following unique case, as it is interesting in connection with Doctors Rusche and Bacon's paper. The patient, a young woman, twenty-three years of age, complained of lower lumbar backache, worse during menstruation, and relieved by rest in bed. She also suffered from obstinate chronic constipation and malaise. The urine was negative. Pelvic and gastro-intestinal examinations were likewise negative. A firm oval smooth abdominal mass, the size of a large hen's egg, could be palpated a little to the right of the midline above the umbilicus in this case. Forceful aortic pulsation could be detected over the inner half of this mass. Cystoscope was negative and the ureters were easily catheterized. Kidney function was slightly increased on the right side. A pyelogram of the right kidney showed marked overlapping of the calices. Unfortunately, the patient, a very nervous individual, refused further cystoscopic or pyelographic investigation. Exploratory laparotomy revealed a somewhat kidney-shaped mass with a pelvis lying transversely across the fifth lumbar vertebra. A third ureter ascended about 1.5 centimeters from the center of this mass, turning to the right and descending about one centimeter, where it joined the right ureter. The mass was fused at both extremities with the right and left kidneys, respectively. Another unusual feature in this case is the normal position of the left kidney. Both kidneys are almost always lower in fusion of the horseshoe type. The patient's symptoms improved and eventually disappeared, following the removal of an appendix which showed evidence of previous inflammation and a cystic right ovary. Should this be classified as a fused third kidney or a horseshoe kidney with three ureters?

Doctors Rusche and Bacon's paper has been most interesting. They are to be congratulated on both their surgical conservatism and their excellent motion picture. According to statistics, operative mortality is increased following operation on horseshoe kidneys.

## SOBISMINOL: ITS ORAL ADMINISTRATION \*

### CLINICAL RESPONSES AND ADVANTAGES IN FIVE LUETIC PATIENTS IN PRIVATE PRACTICE

By WILLARD E. KAY, M.D.

AND

JOHN W. FRICKE, M.D.  
San Francisco

**S**OBISMINOL is a soft mass in capsules, each capsule containing equivalents of 0.2 gram sodium bismuthate, 0.4 gram tri-isopropanolamin, and 0.1 gram propylene glycol. The bismuth content is about 70 per cent, equivalent to about 0.14 gram of bismuth metal in each capsule. The re-

action product has not yet been identified chemically, but appears to be a complex organic bismuth compound with unique properties. The description of the product and its actions, absorption, excretion, toxicity, etc., have been reported in several papers from Doctor Hanzlik's department,<sup>1</sup> and the following brief summary of the product will suffice here: High stability in body fluids, tissues, weak acids and alkalies; readily and adequately absorbed from the alimentary canal; bismuth distributed to all tissues; excreted in urine; low toxicity, but has a fatal dose in animals; tolerance good; potent antisyphilitic actions in experimental and clinical syphilis in all stages. A solution can also be used intramuscularly. The gastro-intestinal absorption, urinary excretion, tolerance, and high antisyphilitic potency of oral sobisminol in patients have been confirmed by Cole, Sollmann, and Henderson of Cleveland,<sup>2</sup> who feel that sobisminol is the most potent bismuth compound of all bismuth compounds by any method of administration. Sobisminol is the only compound of several proposed for oral administration that is really adequately absorbed and effective in antisyphilitic treatment. The favorable reports on sobisminol justified the clinical trial we have given it. Brief protocols of our cases follow.

### REPORT OF CASES

CASE 1.—Mr. A. W., age 83, a capitalist, first seen at his home on July 2, 1935, complained of agonizing pains in the lumbar and lower dorsal regions (which had come on three months prior, following a prostatic resection), an incontinence and nocturia as often as twelve times per night. The pains were especially prone to occur at night while the patient was in bed and particularly when changing position, and were described as lightning and knife-like, radiating from the lower dorsal spine region to the mid-abdominal region.

Physical findings were: an old chronic antrum infection, a chronic bronchitis with bronchiectasis and emphysema, an enlarged heart (chiefly left ventricular hypertrophy), a widened and thickened aorta with especially supra-aortic widening, an accentuated aortic second with a loud systolic blow, moderately thickened peripheral blood vessels, pulse rate 68, blood pressure 200/80 in both arms, a palpable liver but not tender, marked tenderness over the descending colon (x-ray later revealed chronic diverticulosis), moderately atrophic gonads, slightly hypertrophied and firm prostate, and some lordosis, and scoliosis and tenderness of the lumbar and lower dorsal spine. Tendon reflexes of lower extremities could not be obtained. No Babinski or Oppenheim. Romberg was negative, no past pointing. Motor force was good. No sensory disturbances. The pupils were regular in outline, myotic, but reacted sluggishly to light. The blood Wassermann, Kline, and Kahn were three plus. No spinal puncture was done because of the patient's age. Inquiry from his genito-urinary specialists disclosed the fact that he had, in years past, been extensively treated with nearsphenamin, which always gave him a severe reaction, with temperature reaching as high as 102 and 104 degrees, and mercury, intramuscularly, topically, and orally.

Iodobismutol with saligenins was exhibited intramuscularly every five to seven days, which brought about prompt but not complete relief from the pain. After twenty-four injections the Wassermann, Kahn, and Kline, however, did not improve. At this time, April, 1936, the patient decided to take a trip through the Panama Canal to New York, and it was then that sobisminol was administered by mouth. Two capsules of sobisminol were taken each day for approximately fourteen days, at the end of which time he would usually manifest symptoms of intolerance, characterized by weakness, depression, sleeplessness, slight diarrhea, and frequent urination. Upon the earliest signs of saturation the patient would discontinue the capsules for two or three days, and then again feel quite well. After

\* Through the courtesy and kindness of Dr. P. J. Hanzlik, of the Stanford University School of Medicine, San Francisco, and the Cutter Laboratories, Berkeley, we have had the privilege of treating five cases of syphilis orally with sobisminol in our private practice. The clinical responses in all five cases has been so satisfactory that it seems warranted to publish them.

taking the capsules for one month—approximately fifty-six capsules (7.8 grams of bismuth)—the pains in his back disappeared entirely, and the nocturia decreased to an average of three times a night. On his return, two months later, blood Wassermann was taken and sent to Doctor Wyckoff, Stanford Clinical Laboratory, which was negative in all three antigens. The Hinton and Kline tests, however, were positive, three plus.

Mr. A. W. passed away at the age of eighty-eight on March 21, 1938, of pneumonia, working hard up to the onset of his illness of five days' duration. He had been symptomless as far as his lues was concerned, and, additionally, rather frequent attacks of angina pectoris had disappeared altogether, and a brownish-colored skin had cleared and appeared normal to him. Mr. A. W. used approximately 1,200 capsules of sobisminol over a period of about twenty-one months, or an equivalent to 168 grams of bismuth ion. His serology had changed from a three plus Kline, Kahn, and Wassermann to a two plus Kline, one plus Kahn, and a negative Wassermann.

His serological findings are tabulated as follows:

July 10, 1935.....	Kahn 3 plus
	Kline 3 plus
	Wassermann 3 plus
January 17, 1936.....	Kahn 4 plus
	Kline 4 plus
	Wassermann 4 plus

Sobisminol—three capsules daily:

April 17, 1936.....	Kahn 4 plus
	Kline 4 plus
	Wassermann 4 plus

Return from two months' trip:

June 26, 1936.....	Kline 3 plus
	Kahn 3 plus
	Wassermann negative
July 21, 1936.....	Kline 3 plus
	Wassermann negative
October 26, 1936.....	Kline 3 plus
December 11, 1936.....	Kline 3 plus
March 4, 1937.....	Kahn 3 plus
	Wassermann negative
October 13, 1937.....	Kahn 4 plus
	Kline 3 plus
	Wassermann negative
January 19, 1938.....	Kahn 2 plus
	Kline 1 plus
	Wassermann negative

CASE 2.—Mrs. E. R., age 66, was first seen on September 17, 1937, with a "sore" in her mouth, which failed to heal in five weeks, as well as a "sore" on the base of the left index finger which had healed very slowly. A history of lues, contracted eleven years ago (1926), was obtained which had been intensively treated for two years at that time.

Physical examination only revealed an accentuated aortic second sound and a moderately widened aorta, the latter borne out on fluoroscopic examination. The neurologic examination was essentially negative.

Laboratory findings were as follows:

Urine: Clear; acid; specific gravity of 1.028; sugar 3 plus; albumin, negative; white blood cells, 3.4 per high dry field.

Blood: Hemoglobin, 80 per cent, 13.25 grams; red blood cells, 4.38 million; white blood cells, 8,600; differential—neutrophils 55, lymphocytes 38, endotheliocytes 5, eosinophils 2.

Serology: Kahn, 3 plus; Kline, 3 plus; Wassermann negative.

Chemistry: Blood sugar, 250 milligrams per 100 cubic centimeters of blood.

The patient was placed on a diabetic regimen, and sobisminol, one capsule three times daily, was administered. Twelve days following the exhibition of the capsules (thirty-six capsules equivalent to 50 grams bismuth ion) the oral mucosa had healed completely. Approximately 1,000 capsules of sobisminol, 140 grams of bismuth ion, have been taken by her, and at no time have they caused any deleterious effects. The blood picture chronologically is as follows:

November 3, 1937.....	Blood sugar, fasting specimen,
	200 milligrams per 100 cubic
	centimeters
	Wassermann negative
	Kline negative
	Kahn negative

January 12, 1938.....	Blood sugar, fasting specimen,
	136 milligrams
	Serology negative
April 12, 1938.....	Blood sugar, fasting specimen,
	134 milligrams
	Serology negative
July 14, 1938.....	Serology negative

CASE 3.—Mr. M. O., age 34, on November 9, 1937, complained of a sudden ptosis of the left upper eyelid and continuous headache. Physical examination revealed, in addition to the ptosis, an external strabismus, the eye being directed a little downward, a slight protrusion of the eyeball, a mydriasis, and a loss of accommodation. No diplopia was determined. The general physical examination was essentially negative. The blood serum, Kline and Wassermann, were four plus and the spinal fluid revealed a cell count of five, a trace of globulin and sugar, a four plus Wassermann, and a colloidal gold: 234321000.

The patient was placed on one capsule of sobisminol three times a day, and has taken them continuously to the present time. In July, 1938, he wrote that the eye had practically returned to normalcy, that the headaches had disappeared six weeks after the exhibition of the drug, and that he at no time showed any evidence of intolerance, having ingested a little over 700 capsules. This clinical response was confirmed by the patient's local doctor in Nevada. He has promised to return for reexamination before the end of the year.

CASE 4.—Mr. W. F., age 50, a miner in an isolated town in Nevada, came to us in July, 1934, suffering from severe coughing spells, shortness of breath, weakness, and loss of weight. Examination disclosed much density throughout the chest, particularly in the left upper lobe, and in the lower posterior part of the right upper lobe and the upper posterior part of the right lower lobe, a large area of compact density measuring almost five centimeters in diameter. Our impression was that he had a combination of pneumoconiosis and tuberculosis with encapsulated fluid or pneumonitis. No fever was present, and repeated sputum investigations failed to uncover acid-fast organisms. Wassermann and Kahn were both four plus. Antiluetic treatment was instituted. He received two injections of neoarsphenamin, .15 grams and 3 grams, respectively. Following the second injection he developed a scarlatiniform rash with fever. He then received eighteen injections of iodobismutol with saligenins. A radiograph of the lung, taken on November 21, 1934, revealed a marked amount of absorption of the dense area already described, which was so striking after the antiluetic therapy that we thought we were dealing with syphilis of the lung plus pneumoconiosis.

Because of urgent business reasons the patient left for home feeling much improved. A simple cough syrup was prescribed, to be taken when necessary, and lipiodid tablets at periodical intervals. Since then he has come to us for treatment on eight different occasions. His last visit was on February 25, 1938. He still coughed a good deal, especially in the morning; was somewhat short of breath, tired easily, and was underweight. Blood serum revealed Kahn 3 plus, Kline 3 plus, and Wassermann 2 plus. Antiluetic treatment was again exhibited, commencing with neoarsphenamin, .15 gram intravenously, which was followed almost immediately by a severe and almost fatal nitrid reaction with edema, circulatory and respiratory collapse. He then was placed on the sobisminol capsules, one three times a day, and an ample supply was given him to take home, which he gratefully received as a substitute for the injections.

He writes that he has been so busy and has felt so well, *e. g.*, without cough, sputum, and with a general feeling of well-being and gain in weight, that he has delayed his return visit, but will do so in January, 1939. This marked improvement leads us to believe all the more that syphilis of the lung complicates the pneumoconiosis. We might feel that the iodine component of the sobisminol, exerting salutary effect on a pneumoconiotic lung, was responsible had it not been for its (iodine) exhibition previously over a long period of time. He has taken approximately 800 capsules (112 grams of bismuth ion), and has never had

any ill effects. We look forward with interest to our findings on his next visit.

CASE 5.—Mr. J. G., age 25, a printer, complained of severe headaches, confined to the top of his head, which usually forced him to bed. No apparent reason for them could be given by the patient. In the course of a routine examination a three plus Kline was obtained, but no evidence of lead poisoning. The patient denied ever having an acute infection, nor could he give any information so far as his family was concerned, since both his parents died when he was but nine years of age. A careful physical and neurologic examination was made, revealing no evidence of lues, nor could any evidence of hereditary stigmata of syphilis be obtained by careful investigation of teeth, etc. Blood sent to the state laboratory was reported as a three plus Kline and a four plus Kahn, the Wassermann being negative. Stanford Medical School clinical laboratories reported a positive Hinton test and a negative Wassermann, which was slow to clear.

The patient underwent a submucous resection and was relieved of his headaches entirely. Following twelve weekly intramuscular injections of Fraisse's Quinine Iodo-Bismuthate, 0.2 grams, all tests—Kline, Kahn, and Wassermann—were negative, both in our own laboratory and the State of California laboratory. A spinal puncture, too, was negative. Six months later blood again was checked, showing Kline three plus and Wassermann negative in our own laboratory, and Kahn four plus and Wassermann negative in another laboratory.

The apparently conflicting serum reactions were highly interesting, though disconcerting. Several clinical pathologists, as well as Dr. B. S. Kline, were consulted. On two different occasions whole clotted blood, collected under sterile precautions, was sent to Doctor Kline, and the blood on both occasions gave the following results in the slide tests: Diagnostic, plus, minus—doubtful; exclusion, four plus—strongly positive. Doctor Kline was of the opinion that lues could not be excluded because of the persistence of at least weakly positive reactions with the flocculation tests, and did not believe that the four negative Wassermann reactions were as significant as the five weakly positive flocculation reactions, because the latter tests were more sensitive.

The patient was placed on sobisminol capsules, two capsules three times a day, but after twenty-five days' administration the patient became nauseated, so a week's rest was ordered. Since then Mr. J. G. has adjusted the dosage to two capsules before breakfast, and finds he has no symptoms of intolerance whatsoever. His last serologic report on December 8, 1938, both in our laboratory and another laboratory, was negative throughout. A total of 500 capsules had been taken.

Serologic findings were as follows:

July 23, 1936.....	Kline 3 plus Wassermann negative (slow in clearing)
July 28, 1936.....	Hinton moderately positive Wassermann negative (slow in clearing)
July 31, 1936.....	Kline 2 plus Wassermann negative
October 20, 1936.....	Kline 1 plus
December 18, 1936.....	Kline negative Kahn negative Wassermann negative
August 5, 1937.....	Kahn 4 plus Wassermann negative (000000) Kolmer
September 11, 1937.....	Slide test for syphilis by B. S. Kline, M. D. Diagnostic doubtful Exclusion strongly positive
September 24, 1937.....	Diagnostic doubtful Exclusion strongly positive
January 19, 1938.....	Kline 2 plus Kahn 3 plus Wassermann negative
July 14, 1938.....	Kline 1 plus Kahn 2 plus Wassermann negative (000000) Kolmer
December 8, 1938.....	Kline negative Kahn negative Wassermann negative

#### COMMENTS

Our clinical results indicate that sobisminol given orally is definitely effective in cases of late syphilis. Symptomatic and serologic improvements occurred in all five patients. This is in general agreement with the observations of others.

The daily dosage used by us was much less in four of the patients; that is, one-half to one-third the daily dosage now being used in the Stanford clinics and by others. We used generally three capsules, or 0.6 gram, sobisminol daily as against six to nine capsules, or 1.2 to 1.8 grams daily, used by others. The total number of capsules in these four patients ranged from 300 to 1,200, given in from about eight months to two years. The total amount of sobisminol given ranged from 100 to 219 grams, equal to about 70 to 166 grams of bismuth ion. One patient (J. G.) was given six capsules daily, or 1.2 grams, of sobisminol for twenty-five days, total 30 grams of sobisminol, and then three capsules daily, or 0.6 gram, for sixty days, total 36 grams or a grand total of 60 grams in about three months. These are large doses of bismuth, but the absorption is comparatively small, though adequate for antisyphilitic action.

Considering the large dosage, the tolerance was remarkably good. Two of the patients, Mr. A. W. and Mr. J. G., showed some evidence of intolerance, but were able to adjust their dosages easily, in the one case (A. W.) by "resting" a few days, in the other (J. G.) by taking the capsules before breakfast. All five patients gratefully received the capsules as a substitute for the injections, particularly Mr. A. W. and Mr. W. F., both of whom usually had severe reactions following the injection of neoarsphenamin; the former stating he felt that the capsules were the only medication that helped him, and he always stressed the ease of administration, availability at all times, freedom from serious reaction. Mr. W. F. frequently expressed his gratitude for "such a wonderful medicine that can be taken by mouth."

Unfortunately, we could not make excretion tests under our conditions, and when our treatments were begun, the short clinical method for bismuth in urine, developed by Doctor Hanzlik and assistants,<sup>8</sup> had not been introduced. This test, however, would be desirable control on the oral treatment.

#### CONCLUSIONS

The oral treatment of syphilis in all its manifestations by sobisminol marks a great advance in the treatment of patients with this disease, and is a worthy addition to our armamentarium. It enhances the success of treatment by the ease of administration over long periods of time, its freedom from serious reactions, its saving of time, and its low cost, making treatment possible in many cases in contrast to comparatively expensive forms in vogue.

Symptoms of intolerance are few and, when occurring, are easily controlled by discontinuing the drug for a few days. As a corollary, sobisminol can be ingested over long periods of time without intolerance, and patients can receive the proper and

maximum antiluetic therapy even in secluded places or while away from home.

2000 Van Ness Avenue.

#### REFERENCES

1. Hanzlik, P. J., Lehman, A. J., and Richardson, A. P.: Sodium Bismuthate Soluble (Sobisminol): A New Product for Intramuscular and Oral Administration in the Treatment for Syphilis: Preliminary Summary Report, *Am. J. Syph., Gon. and Ven. Dis.*, 21: 1-17, 1937.
- Hanzlik, P. J., Lehman, A. J., Richardson, A. P., and Van Winkle, Jr., W.: Gastro-Intestinal Administration of Sobisminol: Absorption, Distribution and Excretion of Bismuth, *J. Pharm. Exp. Therap.*, 62: 54-69, 1938.
- Hanzlik, P. J., Lehman, A. J., and Richardson, A. P.: Sobisminol: Toxicity, Tolerance, and Irritation According to Different Channels of Administration, *J. Pharm. Exp. Therap.*, 62: 372, 1938.
2. Sollmann, T., Cole, H. N., Henderson, K., and others: Clinical Excretion of Bismuth: Excretion of Sobisminol and of Some Other Bismuth Preparations for Oral Administration, *Arch. Derm. and Syphil.*, 37: 993, 1938.
3. Hanzlik, P. J., Lehman, A. J., Richardson, A. P., and Van Winkle, Jr., W.: Rapid Clinical Method for Bismuth Estimation in Urine, *Arch. Derm. and Syphil.*, 36: 708, 1937.

### URINARY TRACT INFECTIONS

FROM A GENERAL PRACTICE STANDPOINT

By H. C. BUMPUS, JR., M.D.

Pasadena

PART II\*

DISCUSSION by Charles Pierre Mathé, M.D., San Francisco; Harry W. Martin, M.D., Los Angeles; Frank Hinman, M.D., San Francisco.

BY far the commonest of urinary infections are those of the ascending type, one of the more frequent being associated with the passage of catheters into the bladder. The passage of a urethral catheter on a postoperative patient, followed in twelve or twenty-four hours by a chill and pyuria, is frequently interpreted as indicative of faulty technique in its sterilization, or undue trauma by the nurse or house officer officiating. It is now generally accepted by urologists, however, that the primary cause of such ascending infection has occurred prior to the catheterization. The trauma that has resulted from allowing the bladder to become overdistended being the true etiologic factor, whoever is responsible for the delay in ordering catheterization should accept the blame for the subsequent ascending infection—with its elevated temperature, chills, and fever—rather than the one who actually performed the catheterization. There seems little question that the custom of waiting for surgical patients to void after their bladders have filled is responsible for a far greater number of acute renal infections than the poor technique of nurse or house officer who did the catheterization. Nothing so sets the stage for immediate urinary infection as the overdistention of any part of the urinary tract. The stretching of the mucosa causes a serious hemorrhagic exudate which, in the presence of urine, seems to be the finest of culture media.

#### ASCENDING RENAL INFECTION

All urologists can attest to the distressing febrile reactions following the first drainage of an uninfected and frequently unsuspected hydronephrosis. Ascending renal infection stands, today, as the most common cause of death associated with the drainage of the overdistended bladder in prostatic obstruction. In this group should undoubtedly be included those disturbances following cystoscopic examination described by the comforting title, post-cystoscopic reactions or, in the jargon of the specialist, cystoreactions.

Such an attack of acute ascending infection is usually characterized by frequency, dysuria, fever and, if particularly severe, chills, and was treated, until the decade previously referred to, more or less successfully by the administration of methenamin. Its effect was known to depend upon the liberation of formaldehyd, which could only occur in an acid media, and so acid sodium phosphate was also prescribed to insure acidity of the urine. This method of treatment met with failure in all cases in which the urine remained alkaline, either because of the simultaneous ingestion of alkalinizing drugs, or more frequently, due to the presence of a mixed infection in which were included urea-splitting organisms constantly liberating ammonia. In other cases the liberation of the formaldehyd resulted in so much irritation to the urinary mucosa that the symptoms were aggravated rather than improved. When such unfortunate results developed, it was customary to reverse the process by the administration of alkalinizing drugs. If the urine was already alkaline, this, of course, brought no relief.

The effect of acid and alkaline values on the power of growth of organisms in the urine is not a new discovery. Kitasabo in 1888 showed media of different acid values will kill, inhibit or allow typhoid or cholera organisms to grow. In 1917 Quinby suggested the investigation of the effect of acids in inhibiting the growth of bacteria in the human being, and Shohl and Janeway later proved that *B. coli* are inhibited in urine at  $p^H$  of 4.6 to 5.0 on the acid side, and 9.2 to 9.6 on the alkaline side. The  $p^H$  values for the acid side can easily be obtained by the administration of drugs; but it is not possible in the human being to obtain alkaline values sufficiently high to inhibit the growth of organisms, and not until the degree of acidity or alkalinity in urine could be accurately and easily determinable by calorimeter methods, was rational therapy possible.

#### ACIDITY AND ALKALINITY: $p^H$ SCALE

Acidity and alkalinity have long been recognized as important factors in practically all branches of research and industrial work. Although it has proved its value and been widely adopted in so many different lines of work, many still hesitate to use  $p^H$  methods because they feel that its application requires the services of trained experts. Such misapprehension should not exist, since it is almost as easy to make  $p^H$  determinations as it is to make measurements of the rise and fall of the temperature. All are familiar with the Fahrenheit thermometer. On its scale, 32 degrees represents

\* For Part I, see CALIFORNIA AND WESTERN MEDICINE, April, 1939, on page 254.

the freezing point. For the sake of illustration, let us assume that values above or below 32 degrees represent degrees of heat and coldness, respectively. Thus, any value higher than 32 degrees denotes an increase in heat, the degree of heat increasing as the numbers increase. On the other hand, any value below 32 degrees denotes an increase in coldness, the decrease in coldness increasing as the numbers decrease.

In a similar manner the degree of acidity or alkalinity of a solution is expressed by the  $p^H$  scale. Instead of being called degrees, as in the case of the thermometer, the units on this scale are called  $p^H$  values. It is apparent that it is not necessary for a person to know the derivation of the term "degree Fahrenheit" in order to determine the temperature of a solution with a thermometer, nor is it essential that one should know the derivation of the term " $p^H$ " in order to measure the acidity or alkalinity of a solution.

On the  $p^H$  scale the value of  $p^H$  7.0 represents neutrality. The solution is neither acid nor alkaline. Values higher than 7 denote alkalinity, the degree of alkalinity increasing as the numbers increase. Any value lower than  $p^H$  7 denotes acidity, the degree of acidity increasing as the numbers decrease. This increase or decrease is measured in multiples of 10. Thus, a solution with a  $p^H$  of 5 is ten times as acid as one with  $p^H$  of 6.0, or a  $p^H$  of 4.0 indicates an acidity a hundred times as great as a  $p^H$  of 6.0.

The principle of making  $p^H$  measurements is based on the fact that various indicators change color when they are acted upon by solutions of different acidities or alkalinities. Until recently it was impossible, except in careful laboratory experiments, to tell the degree of acidity or alkalinity one was dealing with, as the determination of the reaction of urine was ascertained usually by litmus. Now, however, the exact percentage of acidity or alkalinity can be determined by simply dropping a piece of Squibb's nitrazine paper in the urine and comparing it with a color chart. Such accuracy was not possible with litmus paper, for its color range runs from  $p^H$  4.6 to 8.4, which amounts to 3.8  $p^H$  units, and experiment has shown that  $p^H$  values of 6.6, 6.7, 7.4, and 7.9 will appear neutral to litmus, while values of 6.8, 6.9, and 7 are recorded as alkaline.

Other indicators, such as chlorphenol red and bromthymol blue, change within a range of 1.6  $p^H$  units and so are more accurate. For the practitioner no indicator is as satisfactory as Squibb's nitrazine papers, which are accurate to one-half unit readings.

#### ALKALINITY

Although it was shown experimentally that bacterial growth could not be inhibited by any degree of alkalinity obtainable in the human urine, the belief in its clinical virtues persists, based on the following: That the acidity of the urine rather than the products of bacterial growth are responsible for the irritated mucosa with its associated burning, frequency, and tenesmus. In fact, the idea that increased acidity will produce untoward symptoms is so firmly fixed in the human mind that we find

the unscrupulous, by a campaign of fear, proclaiming this accepted fact in their national advertising in order to dispose of still greater and greater quantities of alkalinizing drugs. Indeed, today soda fountains are taking on the character of virtual prophylactic stations, where the purchase by the hypochondriac of that universal panacea, Alka-Seltzer, is supposed to prevent the worst. If to this group of distracted citizens one adds the large number of food faddists who, by similar urges, are persuaded to ingest ever-increasing amounts of pineapple, orange and tomato juice, in order that they, too, may dwell in safety on the alkaline side, it sometimes seems surprising that a normally acid urine is now ever encountered!

The sad part of this erroneously held belief is that there is no evidence to show that an acid urine is irritating, or that an alkaline urine is soothing. The pertinent point is that irritation, frequency and other symptoms associated with urinary infection are the result of the infecting organisms and their by-products, not the result of the reaction of the urine.

#### METHENAMIN

In our attempt to rid our patient of these various organisms, let us first consider the efficiency of our oldest urinary germicide—methenamin. It is cheap, it has been used for years, and is known to be free of dangers; I have never heard of a death resulting from its administration. To be effective, the urine must be acid in order to liberate formaldehyd, and it is evident that this must be present in the urine in sufficient strength and of long enough duration to be germicidal. If the concentration of methenamin in the urine is .5 per cent and its  $p^H$  is 6, bacteria will survive for twenty-four hours; but if the  $p^H$  is lowered to 5, it will become sterile in six hours. So it is obvious that it is as important to increase the acidity of the urine as to increase the dosage of the drug to obtain the maximum of germicidal effect. In fact, so many patients are sensitive to formaldehyd that the administration of too large doses of methenamin may lead to a bladder irritability quite as annoying as that caused by the infection itself, and hematuria has not infrequently been produced by the drug alone.

Except for this drawback, methenamin is an ideal urinary antiseptic, inexpensive and efficient. In cases where there tends to be any retention of urine from atony of the bladder musculature, the administration of methenamin may cause sufficient vesical irritation to result in better emptying.

#### KETOGENIC DIET AND URINE

In 1931 Helmholz noticed that the urine of his epileptic patients who were on a ketogenic diet did not become foul after standing. He reasoned that this urine must contain some bacteriostatic or bactericidal property not present in normal urine. He, naturally, investigated the possibility that its diacetic content was responsible, but as many colonies grow in urine with .5 per cent diacetic as that without, while in ketonurine growth it was much diminished.

At almost the same time that Helmholz was investigating the cause of the bactericidal effects of

ketonurine, Anson Clark was searching for some drug or diet that would inhibit the growth of colon organisms. Being informed by Barborka of the extreme degree of acidity produced by the ketogenic diet in children with epilepsy, he at once applied the diet to a large series of adults having urinary infections with surprising clinical results.

Helmholz, having demonstrated that the germicidal properties of this urine were due neither to its acidity nor its diacetic acid content, it was not long before A. T. Fuller of England discovered that the germicidal factor was Levor rotary beta-oxybutyric acid. He published his findings in 1933, and it was soon conclusively shown that this acid in concentrations of 0.5 per cent or below was not only bacteriostatic, but definitely bactericidal. But the efficiency of its germicidal effect remained in direct proportion to the  $p^H$  of the urine.

Since betaoxybutyric acid is difficult to manufacture, and is also unstable when taken by mouth except for individuals already in ketosis, M. L. Rosenheim searched through the organic acids for one that would be excreted unchanged in the urine. With such an acid he hoped to duplicate the effect of betaoxybutyric. Schotten in 1883, and Knoop in 1905, had showed mandelic acid to be excreted unaltered in the urine. Being used extensively in photography, it was readily available, and Helmholz injected 700 centimeters of a one per cent solution into a dog over a seven-hour period, during which time the concentration of mandelic acid in the urine varied from 1.5 to .5 per cent. The blood urea and urea clearance tests both showed a temporary insult to the kidney as a result of this injection, with complete recovery some three days later.

When given to a patient in doses of three grams of a 10 per cent solution four times a day, the concentration of the drug in the urine rises rapidly to over one per cent; and at a  $p^H$  of five a concentration of .25 per cent proves bactericidal for most organisms. As in the case of betaoxybutyric acid, the lower the  $p^H$  of the urine the lower is the concentration of mandelic acid necessary to secure bactericidal action. In a series of experiments the bactericidal action of normal urine, to which one per cent of mandelic acid had been added, was found to correspond closely to that of urine to which the same concentration of acid was present on excretion.

Experience has demonstrated that mandelic acid is most satisfactorily administered in the form of its sodium salt neutralized by sodium bicarbonate, and dispensed as a liquid flavored with lemon syrup. A gram of ammonium chlorid should be dispensed with each dose to insure the most effective germicidal  $p^H$  level.

In the presence of urea-splitting organisms, such as the proteus ammonia and pseudomonas, the lowering of the  $p^H$  may prove difficult or sometimes even impossible to accomplish. In such cases ammonium nitrate, dilute hydrochloric or even nitrohydrochloric, should be tried in association with an acid-ash diet. Such patients should be impressed with the contraindication to the ingestion of citrus

fruits, milk of magnesia, or the consumption of large quantities of spinach, celery and other foods of high alkaline-ash content.

If renal function is poor, there is the possibility of producing an acidosis, and it may be impossible with such impairment to obtain sufficient concentration of mandelic acid in the urine to be effective. Under such circumstances the most recent of our urinary antiseptics should be employed.

#### SULFANILAMIDE

The history of sulfanilamide demonstrates how tedious are our advances in therapy, and illustrates how indebted is the medical profession to the labors of those in other fields of science. Physicians are inclined to forget that neither Pasteur, Roentgen nor Currie held M. D. degrees, and few urologists feel any debt of gratitude or, in fact, remember that Arthur Binz, a German chemist, made intravenous urology possible by his synthesizing uroselectan. So with sulfanilamid the profession is again in deep debt to the chemists of the dye industry that developed this drug.

As soon as the bactericidal properties of sulfanilamid were demonstrated, the determination of dosage and discovery of its toxic effects rapidly followed, and quite as rapidly confusion in its nomenclature developed as different chemical houses applied proprietary names, such as prontosil, prontosil, allum, streptocide, et cetera; so that the Council on Pharmacy and Chemistry of the American Medical Association has adopted the term "sulfanilamid" as a nonproprietary name, and has declared that it is unfortunate that the term "prontosil" is used in this country for a compound not identical with the product that has been used in Europe.

Employed first as a specific agent against streptococcal infections, it has proved equally effective in the urinary tract against the Escherichian coli, while paradoxically it has no effect against streptococcus fecalis. It was soon discovered that larger doses of the drug are better tolerated by the patient in bed, and that much smaller doses must be used in the ambulatory cases. Apparently, a concentration of ten milligram per cent in the blood serum is sufficiently large to insure a germicidal effect in the urine, and this can be obtained by administering 40 to 60 grains a day in ambulatory cases. Reactions vary and must be warned against; happily, if the drug is discontinued at once they subside rather rapidly. The most annoying, although not most serious, are the skin reactions most likely to occur in warm weather, and characterized by extensive erythema and moderate vasculature. When large doses are given, the blood counts require careful checking, as the destruction of red blood cells has been known to be as high as a million in twenty-four hours.

If the urine is not rendered sterile in a two weeks' period, one may be certain that some abnormal anatomical condition is preventing proper drainage, or that one of the organisms—such as streptococcus fecalis or areabacteric areagenis—is present, and that the battle is going to be hard and long-fought.

It apparently has little effect on streptococcus fecalis, which is the specific organism of impetigo and frequently seems as difficult to eradicate from the urinary tract as from the skin. This organism probably never occurs as a natural invader of the urinary tract, but is carried in on instruments or catheters improperly sterilized. In stained smears it is characterized by the organisms occurring as oval cocci joined together by a refractive streak down the center. When a urinary infection has not responded to this type of therapy, the presence of this organism should be suspected. The administration of the drug by mouth appears to give better results than its administration by needle, and the new form of the drug dispensed under the name of "Neoprontosil," while unquestionably less toxic, seems also less efficacious.

Another advantage of this drug over other urinary germicides is its effectiveness in an alkaline media. So many urinary infections are mixed in character, and not infrequently one of the organisms will be capable of splitting urea into ammonia, so that the possibility of receiving any therapeutic effect from either mandelic acid or methenamin is nil. The pseudomonas and proteus group of organisms are the chief offenders in this respect, although there are some of the cocci that seem but slightly less efficient in the production of ammoniacal urine.

One of the most frequent causes of failure in the treatment of urinary-tract infections in the male is the reinfection of the urine from chronic foci in the prostate. Sulfanilamid is found in the prostatic secretion and would appear, therefore, to be particularly indicated in these cases. Were it not for its distressing side reactions, this drug would indeed seem the ideal urinary antiseptic, but its untoward reactions seem the thorn of this particular rose.

Coccus infections of hematogenous origin, as described earlier in this paper, seem to be little affected by either mandelic or prontosil therapy, while those of the ascending type usually respond to one or the other. Fortunately, the hematogenous type of infection is, in the majority of cases a self-limited affair, from which the patient recovers; but when it assumes a chronic form, treatment by nearsphenamin has proved the most successful drug for its eradication. Its mode of action is still in dispute, but Pace believes sufficient arsenic is eliminated in the urine to produce a bactericidal effect. This seems somewhat doubtful, however, as such infections, when limited to the bladder, do not respond as well as do those in which the kidneys are also involved. The most efficient and best tolerated dosage scheme is to give two-tenths grams, followed in five or six days by three-tenths grams. If no improvement is noted after these two injections, it is rare for a third dose to produce good results. The elimination of foci in the cervix, prostate, teeth, and tonsils in this type of infection is most important, and until taken care of recurrences seem certain.

#### IN CONCLUSION

In conclusion, it seems well to emphasize that in the treatment of urinary-tract infections we now have available four efficient drugs, namely,

methenamin, mandelic acid, sulfanilamid, and nearsphenamin. If cases of such infection do not respond to their proper therapeutic administration, the probabilities are great that there are associated pathological conditions in the form of stone, obstruction, stasis or neoplastic disease, which demand thorough investigation by your urological colleague.

112 North Madison Avenue.

#### DISCUSSION

CHARLES PIERRE MATHÉ, M.D. (450 Sutter Street, San Francisco).—Doctor Bumpus' timely paper, dealing with the rapidly changing treatment of infection of the genito-urinary tract, will aid in clarifying this obscure subject in the minds of general practitioners. Unfortunately, in our enthusiasm to employ new medicaments, represented as the last word in urinary antiseptics, one is liable to overlook certain fundamental principles of treatment that have stood the test of time and that are so necessary for eradication of infection of the genito-urinary tract. The essayist does well to emphasize the fact that the infecting organism should be identified before it is attacked by a bactericide. Good, well-stained smears of urinary sediments are not so difficult to make if one will only take the necessary time and trouble, and then one can always intelligently supplement his studies by culture and animal inoculation. In patients in whom infection persists in spite of the administration of antiseptics that the physician has chosen to administer, further urologic investigation should be carried out. In these patients, stasis is the most common cause of persistent infection. We have seen a number of cases presenting resistant chronic infection in the kidney which cleared up permanently after relieving obstruction, viz., dilatation of a ureteral stricture, corrective plastic repair of hydronephrosis, and suspension of an obstructed, ptosed kidney. Other causes for persistent urinary infection are stone, vesical neck obstructions, foreign bodies, neoplasms, etc. It is obvious that, although infection can be ameliorated in these patients by the use of urinary antiseptics, definite relief cannot be obtained without eradication of the predisposing cause.

Out of the large number of available antiseptics, Doctor Bumpus has chosen four that he feels are most efficacious in combating the different types of urinary infection. These are: methenamin, mandelic acid, sulfanilamid, and nearsphenamin. To this list I would add methylene blue, whose germicidal effect against cocci, particularly the staphylococcus, has been definitely proved. It is less powerful than sulfanilamid, but is indicated when this drug is poorly tolerated. Methylene blue may also be used to supplement sulfanilamid, in which case it aids in the elimination of that drug, counteracts toxicity, decreases the severity of methemoglobinemia occurring in sensitive patients as well as prolonging bactericidal action. I do not feel that pyridium, caprokol, salol and other antiseptics should be condemned. They have their place, affording relief to certain patients who fail to respond to the four drugs enumerated above; and they are also efficacious in others in whom they are not tolerated.

I am heartily in accord with the opinion that methenamin is an efficient urinary antiseptic, provided that the urine has been properly acidified. We have found its intravenous use, injecting two grams of this drug daily, most efficacious for the treatment of urinary fever, the well-known syndrome of chills and fever that sometimes follows instrumentation. We feel that in many of these cases fever is due to invasion of the blood stream by infecting organisms. Strange as it may seem, we have been able to prevent the development of this type of bacteremia by the previous empirical administration of quinin.

✱

HARRY W. MARTIN, M.D. (6253 Hollywood Boulevard, Los Angeles).—Doctor Bumpus has given us a very timely paper and one that should be studied by every general practitioner, because urinary antiseptics at this time are a matter of great discussion between physicians and surgeons, and also the laity as well.

It must be borne in mind that, with any infection in the urinary tract, drainage is the most important factor in its treatment, and no urinary antiseptic can be efficient if obstruction to drainage is present.

Another notable point that Doctor Bumpus has brought out is the significance of the Gram stain, which is sufficient for the diagnosis of urinary sediment and more accurate than cultures. Many physicians are of the opinion that in order to diagnose the majority of urinary-tract infections it is necessary, as Doctor Bumpus points out, to have cultures made. The Gram stain is the most efficient aid we have and everyone can avail themselves of it, and only in certain cases is it necessary for extra laboratory work.

Another point of Doctor Bumpus' worth noting is the necessity of catheterization following operative procedure. Years ago it was taught that catheterization should be resorted to only after every other procedure to empty the bladder had failed, with the result that more damage was done by the distended bladder and its back-pressure changes on the kidneys than could ever be done by catheterizing.

Methenamin is a valuable drug if administered properly when the urine is carefully watched. Fairly large doses should be given if good results are to be obtained, but care must be taken not to cause hematuria.

Sulfanilamide is very likely the most widely discussed drug on the market today, and practically every layman has some slight knowledge regarding it. Like every new discovery, however, care must be taken to see that it is used properly. I recently saw an ambulatory patient who had been taking 80 grains a day for two months, with no change in the urine but a marked change in the blood.

I am firmly of the opinion that if the urine does not show any changes the drugs should be discontinued after two weeks. I also believe that better results are obtained when large doses are given, but that the patient should remain in bed while taking the larger dose.

✱

FRANK HINMAN, M.D. (384 Post Street, San Francisco).—Between the lines of this report by a specialist, upon the use of urinary antiseptics in general practice, it seems to me that I can read doubt and uncertainty. In his opinion, only four of the myriads of drugs advertised and advocated are at all reliable, and he shows that the potency of each one of these is largely contingent. My own incredulity as to the efficacy of casual medication in the treatment of infections of the urinary tract, as well as my firm conviction that therapy should never replace diagnosis in these conditions, and that when so used it only hinders diagnosis, lets me imagine the more easily, perhaps, this meaning in Doctor Bumpus' paper. His pessimism is fully shared. Most urologists seldom use other drugs than hexamethylenamin, one form or another of mandelic acid—of which a calcium salt has seemed to some less disturbing to most digestive tracts than the sodium—sulfanilamide and arsphenamin. It is important, of course, to know the limitations of use and the prerequisites for greatest efficiency, so ably outlined by Bumpus, of each of these internal urinary antiseptics. Each drug has its own particular field of usefulness, and each, as a rule, acts best only under certain particular circumstances; how useless, for example, are the first two, without proper urinary acidity! Ahead of knowing these contingencies, however, I should place knowledge of the urinary infections themselves. In my opinion, greater attainments are to know well all of the clinical possibilities in both the upper (renal) and lower (urogenital) tracts when pus and organisms occur in the urine; to know when to suspect urinary sepsis as the cause of fever and prostration even in the presence of a negative urine; and, above all, with the clinical induction of the full significance of his history as a guide, to know how to examine the patient for the purpose of diagnosis. The services of a specialist are not required for preliminary studies of this kind, and the routine use of internal urinary antiseptics without such studies is malpractice. The mind of an experienced clinician follows a very simple but logical deduction as facts and findings are brought to it step by step with the history, physical examination and course of clinical events.

The history gives the first lead (the sex, the age, the complaint, and the clinical coincidences). The physical examination gives the next cue (pulse, temperature, palpation

of the kidney area, external genitalia, etc.), and then, in the order indicated, laboratory and special investigations (blood counts, urine examinations, particularly the "three glass test," or two if preferred, rectal [and vaginal] examinations with a study of the prostatic secretion, exploration by x-rays, functional tests, occasionally intravenous urograms) will enable the trained clinician to make a very close, if not correct, deduction of the condition, enough at least to tell him whether or not to put his trust wholly in internal urinary antiseptics. *The dangers of procrastination grow greater and greater as urinary antiseptics grow better and better.* Why all this excitement when the ingestion of a few pills clears the urine? The wise doctor, knowing that most urinary infections are secondary, will suspect other trouble even when successful with his pills. He will not be satisfied until all the findings, gradually collected step by step by means of the preceding studies, either demonstrate the suspected pathologic changes or prove that his suspicions were false. In the course of such investigations he may conclude that the services of a specialist are in order (residual urine, cystoscopy? ureteral catheterizations?). Nevertheless, by his knowledge of infections of the urinary tract and his ability to carry out, not as a routine but as indicated, these simple preliminary steps of investigation for which the services of a specialist are not needed, is established the degree of his clinical wisdom. Few conditions exact a graver price for rough handling and mismanagement. None of the preceding studies, however, is instrumental, and all, when rightly used, are perfectly safe. Answers to queries raised by each step of examination are necessary if the clinician expects to meet, in the best scientific manner, the many contingencies of efficiency in the use of internal urinary antiseptics. By the nature of these answers, their fullness and accuracy, is measured his prescience as a clinician. Clinical sagacity in choosing the right road to a correct diagnosis of infections of the urinary tract is the incidental essence of success in their treatment with internal urinary antiseptics.

## THE LURE OF MEDICAL HISTORY†

### MEDICINE IN COLONIAL AMERICA\*

By DAVID HARRIS, Ph.D.  
Stanford University

#### I

IN a time when medical knowledge has progressed far beyond the scope and imagination of its primitive days, it is natural that we should have forgotten the story of Colonial America's medicine. The worthy preacher has won admiration for his labors, and the legal man's services have rightly received the praise of later generations, but the doctor, crude though he may have been, has been allowed to sink into an unwarranted oblivion. Church and court have not been radically altered; we feel in them strong ties to the past. Medicine, on the other hand, has gone far from the men and practices of the sixteenth and seventeenth centuries. The pioneer ministry of healing, consequently, seems but the most bizarre of unrelated fancies.

† A Twenty-Five Years Ago column, made up of excerpts from the official journal of the California Medical Association of twenty-five years ago, is printed in each issue of CALIFORNIA AND WESTERN MEDICINE. The column is one of the regular features of the Miscellany department, and its page number will be found on the front cover.

\* From the Department of History, Stanford University. The author prepared this essay a number of years ago when he was an undergraduate. The friendly interest of an esteemed colleague in the Stanford Medical School has induced him to overcome his hesitations and offer the study to a wider circle of readers.

Yet to the struggling colonists the physicians seemed as indispensable as today, and their ministrations brought blessing and comfort to many. They served as best they could, and for that service they deserve the charitable memory of a generation which has profited by their pioneering.

#### BARBER-SURGEONS OF EARLY COLONIAL DAYS

In the records of the immigrations to America and of the early settlements there are to be found but few references to officially appointed physicians or surgeons. However, with the ships' crews of the day there sailed, almost without exception, someone who had the official title of surgeon, even though his qualifications were scant. It is not surprising, then, that among the pioneers there should be found men—barber-surgeons at first—who were serving bodily needs. The honor of being the first physician in the colonies is ascribed to Thomas Wooten, surgeon-general of the London Company, who arrived in Virginia in 1606. The next year "Doctor" Walter Russel was in the country, and accompanied Captain John Smith on some of his explorations. These men, along with Anthony Bagnall, must have been, in modern language, transients; for in 1609 the picturesque Captain went to England for treatment for an injury received by the explosion of gunpowder, "for there was neither chirurgion nor chirurgery at the fort." A year or two later Dr. Lawrence Bohun, former student in Holland, came to Virginia as surgeon-general. Next in time was Dr. John Potts, M.A., who came in 1624; was temporary governor in 1628; and in 1630 was reputed to be the only physician in the colony. This gentleman seems to have been a reckless liver, embroiled in all of the factional intrigues of his time. On one occasion his medical skill alone saved him from being hanged for theft. Seemingly the governor did not have the courage to put to death the colony's only medical man in time of epidemic.

#### EARLIEST PRACTITIONER IN NEW ENGLAND

The earliest practitioner in New England, and perhaps the first permanent "physician," was Samuel Fuller, who came in the *Mayflower*. He had no medical degree and probably did his ministry of healing and blood-letting in connection with his duties as deacon at Plymouth. In 1629 the Massachusetts Bay Company entered into an agreement with Lambert Wilson, chirurgion, that he should serve the settlers and neighboring Indians for three years, and give medical instruction to one or two of the young men of the colony. Most conspicuous, however, of the early New Englanders was John Winthrop, Jr., who came to the colony as a doctor in 1630 after graduating from Trinity College, Dublin, and traveling in Holland, France and even Turkey. For years, he was the governor of Connecticut and a writer on a variety of scientific subjects.

In 1626 New York, then Dutch New Amsterdam, received from Holland two *zieckentroosters* who were educated primarily for spiritual ministration, but also had a training in simple healing. Another Dutchman, of perhaps more questionable

attainments, came in 1631 as a medical practitioner. Still another immigrant, a Huguenot, came from Leyden in 1637, and he was perhaps New Amsterdam's first regular physician.

One of the founders of Rhode Island was Dr. John Clark, a London physician, who had been banished from Boston along with Roger Williams. In 1633 the General Court gave what is thought to be the first license to practice: Captain John Cranston was licensed "to administer physicke and practise chirurgerie, and is by this Court styled doctor of physick and chirurgery by the Authority of this the General Assembly of this Colony."

Jan Peterson was "barber" to one of the colonies of the Swedes and Dutch on the Delaware at a salary of ten guilders per month in 1638. John Goodson, "Chirurgion to the Society of Free Traders," is mentioned as the first practicing physician in Pennsylvania. He arrived shortly after William Penn.

Another interesting case where medical skill saved a man's life is that of Jacob Lumbroze, "the Jew Doctor" from Lisbon. In 1656 the Maryland courts condemned him to death under the "Toleration Act of 1649" because of his refusal to accept Christian orthodoxy; but he was pardoned "because of professional knowledge."

#### ONE HUNDRED AND THIRTY-FOUR PHYSICIANS IN NEW ENGLAND PRIOR TO 1692

But the list must not be continued. The physicians increased as the years went by and kept up their inconspicuous service, thereby being condemned to personal oblivion while collectively perpetuating themselves to the thoughtful reader. In the three generations prior to 1692, one hundred thirty-four men in New England are listed as physicians in name at least. At the close of the Revolution there were from three thousand to thirty-five hundred doctors practicing, of whom not more than four hundred had received medical degrees. Almost twelve hundred men served in the Surgical Service of the Revolutionary Army, and many doctors distinguished themselves in nonmedical contributions. It is interesting to note, in passing, that it was a physician, Dr. Joseph Warren (1741-1775), who found that the British were to attempt to capture the stores at Concord and dispatched Paul Revere. Dr. Ephraim Brevard, a Princeton graduate, drafted the Mecklenburg Resolution in 1755. Among the signers of the Declaration of Independence were several men sometimes styled physicians, but Benjamin Rush (1745-1813) of Pennsylvania was the only genuine doctor of medicine.

Since there were no legal limitations on medical practice, the increase in the number of doctors may be accounted for in several ways. Under the circumstances it was inevitable that many charlatans should set themselves up as healers. Others, like the early Virginia "practitioners," drifted in from the outside world with their varying degrees of knowledge and skill. For example, Gustavus Brown, nineteen years of age, arrived in Maryland in 1708 as surgeon or surgeon's mate to his ship. During the course of a visit to the shore a

storm arose, making it necessary for the ship to weigh anchor and quit the port, and Brown was left to build up a medical practice and accumulate a fortune.

#### PERIOD OF APPRENTICESHIP

In the earlier Colonial period it was the general custom for young men desiring a medical training to take their degrees at Edinburgh, London, or on the Continent. However, there were many aspirants in America too poor to go to Europe, and they indentured themselves for their instruction to practitioners in this country. Many of the successful men gathered around them small groups of students who assisted in the regular practice and listened to occasional talks and lectures, for which they sometimes paid a set fee. This situation was apparently not universally satisfactory. Eliot, the Indian missionary, wrote in 1647: "Our young Students in Physick may be trained up better than yet they bee, who have onely theoreticall knowledge, and are forced to fall to practise before ever they saw an Anatomy [dissection] made, or duley trained up in making experiments, for we never had but one Anatomy in the Countrey, which Mr. Giles Firmin (now in England) did make and read upon very well, but no more of that now."

In the same year the Massachusetts General Court Records printed this suggestive statement: "We conceive yt very necessary yt such as studies physick, or chirurgery may have liberty to reade anotomy & to anotomize once in foure yeares some malefactor in case there be such as the Courte shall allow of."

#### FIRST DISSECTION IN THE COLONIES

Not for over one hundred years do we have records to show progress in this line. In the year 1750 Dr. Thomas Cadwalader, who had been a student in London, gave a series of practical demonstrations of anatomy to his colleagues in Philadelphia. In the same year a criminal in New York City was executed for murder and his body was dissected by Dr. John Bard and Dr. Peter Middleton for the instruction of a group of students in medicine. This is considered the first attempt in the colonies to acquire medical knowledge by dissection.

#### PENNSYLVANIA HOSPITAL: BENJAMIN FRANKLIN, FOUNDER

Two years later, in 1752, came other adventures in formal medical instruction. The Pennsylvania Hospital, founded in 1750-1751 by Benjamin Franklin and Dr. Thomas Bond, allowed students who were not apprenticed to some doctor the privilege of making the rounds after payment of a "gratuity." In 1773, apprentices were taken for five years, and at the end of his service each man was to receive a certificate and a suit of "cloathes."

#### ADVERTISEMENT CONCERNING A COURSE IN ANATOMICAL DISSECTION

The following advertisement appeared in the *New York Weekly Postboy*, January 27, 1752: "Whereas Anatomy is allowed on all Hands, to be the Foundation both of Physick and Surgery, and

consequently without some knowledge of it, no Person can be duly qualified to practice either: This is therefore to inform the Publick: That a course of Osteology and Myology is intended to be begun, some time in February next, in the City of New Brunswick. (of which Notice will be given in this Paper, as soon as a Proper Number has subscribed towards it.) In which Course, all the human bones will be separately examined, and their Connections and Dependencies on each other demonstrated; and all the Muscles of a Human Body dissected; the Origin, Insertion, and Use of Each, plainly shewn, &c. This course is proposed to be finished in the space of a Month. By

Thomas Wood, Surgeon

N. B. If proper encouragement is given in this Course, he proposes soon after, to go thro' a course of Angiology and Neurology; and conclude with performing all the Operations in Surgery on a Dead Body: the use of which will appear to every person, who considers the Necessity of having (at least) Seen them performed; before he presumes to perform them himself on any living Fellow Creature."

In the same year Dr. William Hunter of New Port, Rhode Island, a relative of two of the greatest medical teachers of England, was delivering lectures on anatomy and comparative anatomy.

#### LECTURES ON MIDWIFERY PRACTICE

But the man most responsible, perhaps, for the advancement of the study of medicine was Dr. William Shippen, Jr., of Philadelphia, graduate of Princeton and Edinburgh. He returned to his home in 1762 and advertised a course of twenty lectures on midwifery. Up to this time very few men had been engaged in obstetrical work. During the year Doctor Fothergill of London presented the Pennsylvania Hospital library its first volume and seven cases of anatomical charts and casts. To promote further study, Doctor Shippen agreed to display these to interested persons who were willing to give one dollar to the hospital.

#### ANATOMICAL LECTURES: EXCITING EXPERIENCES

Continuing his work, Doctor Shippen announced a course of anatomical lectures in the *Pennsylvania Gazette*. A portion of the announcement is as follows: "Philadelphia, November 11th, 1762.

"Mr. Hall

"Please to inform the public that a course of Anatomical Lectures will be opened this winter in Philadelphia, for the advantage of the young gentlemen now engaged in the study of Physic, in this and the neighboring provinces, whose circumstances and connections will not admit of their going abroad for improvement to the anatomical schools in Europe; and also for the entertainment of any gentlemen who may have the curiosity to understand the anatomy of the Human Frame. In these lectures the situation, figure and structure of all the parts of the Human body will be demonstrated, their respective uses explained, and as far as a course of anatomy will permit, their diseases,

with the indications and methods of cure briefly treated of."

In February, 1763, the following notice was published: "Dr. Shippen having finished on Osteology—the most dry, though the most necessary part of anatomy—will admit gentlemen who want to gratify their curiosity, to any particular lecture—Tickets five shillings."

His first course was attended by ten students, but in later years attendance at some classes ran as high as two hundred and fifty. There was, on the part of the general public, an aversion to the establishment of a place for human dissection, and on several occasions Doctor Shippen's laboratory was attacked and once his home was mobbed. Doctor Norris says: "In one of these attacks the Doctor, himself, made a narrow escape by passing out through an alley, while his carriage, which stood before the door with its blinds raised, and which was supposed to contain him, received, along with a shower of other missiles, a musket ball through the center of it. More than once he was compelled to desert his own dwelling and conceal himself, in order to avoid the tyrannical exactions of the people. Several times he addressed the citizens through the public papers, assuring them that the reports of his disturbing private burying-grounds were absolutely false, and stating that the subjects he dissected were either of persons who had committed suicide, or such as had been publicly executed; except, he naïvely adds, 'now and then one from the Potter's Field.'"

#### FIRST MEDICAL DIPLOMA WAS GRANTED BY YALE UNIVERSITY

The first medical diploma given in this country was presented to Daniel Turner by Yale University in 1720. This was an honorary degree conferred on the gentleman after he had made a substantial donation to the school. Latin scholars of the time declared that the M.D. stood for *Multum Donavit*—"He gave much."

#### EARLIEST MEDICAL SCHOOL OF THE COLONIAL ERA: IN PHILADELPHIA

The earliest formally constituted medical school was the department established in the College of Philadelphia in 1765 under the leadership and instruction of Dr. John Morgan, former student in Europe, and Dr. William Shippen, Jr. Courses were offered in Anatomy and Surgery, "Theory and Practice of Physic," *Materia Medica*, Pharmacy, Chemistry, Botany, and Natural Philosophy. The fees for single courses under the different professors were not to exceed six pistoles, or twenty dollars, a course. Rigid requirements were laid down for both Bachelor's and Doctor's degrees, and the former degree was conferred on ten candidates on June 21, 1768. The custom of giving a Bachelor of Medicine degree was maintained until 1789. At the Commencement of 1771 four of the first graduates were given the degree of M.D. The College of Philadelphia Medical Department became a part of the University of Pennsylvania in 1791.

#### KING'S COLLEGE OF NEW YORK FOLLOWS

The Medical School of King's College in the year 1768 became the second and last institution organized before the Revolution. At the end of the year in 1769 two M.D. degrees were conferred, and one of the graduates returned for an M.D. in 1770. This school collapsed during the Revolution and was not revived until 1792 as a part of Columbia University.

Department of History, Stanford University.

(To be continued)

## CLINICAL NOTES AND CASE REPORTS

### GONORRHEAL VAGINITIS IN CHILDREN\*

REPORT OF 548 CASES—1917-1937

By J. C. GEIGER, M.D.,  
R. W. BURLINGAME, M.D.

AND  
ETHEL RIGHETTI, M.D.  
San Francisco

GONORRHEAL vaginitis in children is not an uncommon disease. Its prompt detection in hospitals and institutions is necessary because of the apparent ease of spread by contact, both direct and indirect. The discharge on the diaper may be the only sign noted. Experience at the San Francisco Hospital of the Department of Public Health indicates the necessity for routine vaginal smears on all patients under fifteen years entering the institution. This procedure is repeated for three successive days and has proved successful in discovering cases heretofore unsuspected and uncontrolled. The usual sources of referred cases are clinics, boarding homes, and private physicians.

#### CLINICAL MATERIAL FOR THIS STUDY

A series of 548 cases has been observed during the period 1917-1937. The age periods range from two days to fifteen years. The lowest number of cases (7) occurred, respectively, in 1919 and 1920, and the highest number (64) in 1927. It may be of interest that in none of the cases were there such complications as arthritis and pelvic inflammation, so generally noted in gonorrheal infections of the older age groups. Furthermore, when gonorrheal ophthalmia was present, it appeared to have occurred almost concurrently, since both conditions were apparent on entrance in the acute stage. In those cases without gonorrheal ophthalmia, it may be of further interest to note that, despite the fact that no special precautions were taken to prevent this complication, none occurred. Of the total 548 cases, 66 were discharged, usually on the insistence of parents, to private physicians and clinics. Four hundred and ninety-five cases (or approximately 90 per cent), occurred between the ages of two and

\* From the Department of Public Health, City and County of San Francisco.

twelve years; and 220 cases (or approximately 42 per cent), between the ages of six and nine years. Inasmuch as this can be considered a disease without mortality or complications, the efficacy of the treatment used can only be determined by days of hospital stay before the patient is released as cured. The criteria of cure are three consecutive, microscopically negative vaginal smears, the absence of pus cells, and, clinically, no discharge. The smears and examination are to be made at five-day intervals. If previous smears from the urethra showed positive microscopical findings, the same criteria established for the "cures" must be met. It is of decided interest to note that thirty-one patients returned with positive microscopic smears, but with negative clinical findings. These cases were classified as relapses, though the question of reinfection could not be eliminated in many. Eleven additional cases returned twice after being discharged as cured, and one case returned three times. Therefore, in the total number of 482 cases, 42 are to be classified as relapses, or possible reinfections.

#### TREATMENT METHODS DURING DIFFERENT PERIODS

Because of the length of the period under discussion (1917-1937), the methods of treatment have varied with the years. From 1917 to 1921, inclusive, the routine procedure consisted of warm vaginal douches of 1-4000 potassium permanganate, administered night and morning to the patient in a reclining position. This was followed by instillation of 10 per cent argyrol solution with further substitutions of solutions of acriflavin, neo-acriflavin, dichoramin-T in oil, metaphen, and other antiseptics. Such treatment was continued for two weeks, then smears were taken and examined microscopically at the five-day intervals mentioned heretofore. If smears were found positive, the treatment was continued. The average hospital stay for the patients so treated was 97.7 days.

In 1921 the routine treatment was varied to a nightly twenty-minute hot sitz bath at 108 degrees Fahrenheit, and this was followed by a douche with tap water and a vaginal cotton tampon saturated with 4 per cent mercurchrome solution. This tampon was left in place during the night. The following morning, the tampon was removed, and a douche of one gallon of potassium permanganate administered to the patient in a reclining position. This course of treatment was followed for two weeks, and then smears were taken. With few exceptions, this type of treatment was continued through 1934, and the average hospital stay shown to be 91.6 patient days.

In 1932, five cases were selected for treatment by subcutaneous injection with gonorrheal vaccines. In addition, a gonorrheal antigen in jelly was used to replace the usual mercurchrome tampon. Two of these patients were given thirteen injections at four-day intervals. The dose began with 50,000,000 organisms and was gradually increased to 170,000,000. Both patients were released as cured in fifty-four and sixty-four days, respectively. In another patient, six injections of vaccine were ad-

TABLE 1.—Summary Showing Results Under Different Treatment Procedures

Average time in hospital with douches and local application of antiseptics .....	97.7 days
Average time in hospital with douches, mercurchrome and sitz baths .....	91.6 days
Average time in hospital with gonorrheal vaccine (1 m.) and intravaginally .....	105.7 days
Average time in hospital with 50 to 150 unit doses theelin started late .....	52 days
Average time in hospital with 50 to 100 doses theelin alone .....	57.3 days
Average time in hospital with 2,000 unit doses theelin alone .....	57.2 days
Average time in hospital with 10,000 unit suppositories amniotin alone .....	44.8 days
Average time in hospital with 10,000 unit suppositories and 2,000 theelin (1 m.)—1 case .....	89 days
Average time in hospital with 2,000 unit doses of theelin and sulphanilamid—2 cases .....	49 days
Average time in hospital with 2,000 units theelin (1 m.), 10,000 unit suppositories—2 cases .....	60 days

ministered, while one had ten injections, and another, eighteen. The average hospital stay for this group was 105.7 days. This type of treatment was discontinued.

In 1933 and 1934, six patients were selected for treatment with theelin. All of these patients had been inmates of the hospital and under routine treatment with chemical douches for 60, 148, 204, 229, 232, and 608 days, respectively, and were classified as a highly resistant type of infection. The results of treatment were interesting. One patient received thirteen intramuscular injections of 1 cubic centimeter (50 rat units per cubic centimeter), of theelin daily; the other patients received twelve, nineteen, twenty-three, thirty-one, and thirty-two injections, respectively. The average hospital stay, after theelin was administered, was fifty-two days.

#### THEELIN TREATMENT

Beginning in 1935, treatment with theelin was made a routine procedure, and all irrigation and local douche treatments were discontinued. In 1935 and 1936, twenty-nine patients were treated with theelin in doses varying from 50 to 150 units. The average hospital stay of this group was 57.3 days. In addition to these cases, twenty-nine patients were treated during 1936, with an estrogenic substance containing 2,000 rat units per cubic centimeter suspended in corn oil. The average hospital stay was 57.2 days. In 1937, an additional six patients were treated daily with vaginal amniotin suppositories of 10,000 rat unit doses. The average hospital stay for this group was 44.8 days. In 1937, there were three cases treated with amniotin suppositories, theelin, and sulphanilamid. Table 1 summarizes the results of various types of treatment.

#### IN CONCLUSION

The cases in each of these groups are too few in number to draw definite conclusions. It would appear, however, that estrogenic substances, with or without sulphanilamid, are an improvement over the antiseptic douche.

101 Grove Street.

# EXTREME HYPEREXIA AND PROLONGED CONVULSION

ACCOMPANYING HEAT STROKE: COMPLETE RECOVERY

By C. C. FITZGIBBON, M.D.

AND

V. S. BRIDEN, M.D.

Merced

**P**ATIENT, V. S., Mexican, age 43, is a common laborer, and was piling lumber all day on August 2, 1938. The weather was exceptionally warm, temperature rising above 105 degrees in the shade. At 4:30 p. m. he suggested quitting work, sat down to rest, and that is the last he remembered. Coworkers stated that he became delirious and uncontrollable, and it required four men to hold him. He was taken to an emergency station in the lumber camp.

One of us was called by the male nurse at the station, who stated that the patient was having a continual convulsion and his axillary temperature was 110 degrees; breathing was labored and his pulse was feeble and weak. Morphin sulphate, one-fourth grain, was given by hypodermic.

When we arrived the patient was comatose and having a generalized convulsion, which had persisted for one and one-half hours. His skin was dry and hot. Axillary temperature was above the limits of the thermometer, which was 110 degrees. His eyes were opened and fixed, pupils were pinpoint in size, and did not react to light. It was impossible to obtain a radial pulse; breathing was shallow and irregular, and he displayed all the signs of impending death. A tentative diagnosis of heat stroke, with disturbance of the heat-regulating mechanism was made, and symptomatic treatment begun. Ice pack to his head and a cold sponge were given, and 1000 cubic centimeters of normal saline was started intravenously. Then  $3\frac{3}{4}$  grains of sodium amytal were given intravenously, which completely relaxed the convulsion. Two cubic centimeters of coramin,  $7\frac{1}{2}$  grains of caffeine, and 5 cubic centimeters of metrazol were administered intravenously. Following the normal saline, 1000 cubic centimeters of 5 per cent dextrose in normal saline was given.

One hour after treatment was started, the patient's pulse was of fair quality—96 per minute. The temperature dropped to 103.8, and his blood pressure was 72 systolic; breathing was regular. The patient remained relaxed, but on manipulating his arms a slight generalized convulsion began. Three grains of sodium luminal were given intramuscularly. His condition remained fair, and he was moved by ambulance for twenty-six miles to a hospital. On arrival at the hospital, 1000 cubic centimeters of 10 per cent dextrose in normal saline were given intravenously.

August 3, 1938.

The following morning the patient attempted to get out of bed. He was incontinent, both from bladder and bowels. He would arouse to strong stimuli, but would not respond. He appeared dazed. The temperature was 99.2. A spinal tap was done;

spinal fluid was not under increased pressure, and there were no cells found. Red blood cells, 5.14 million; hemoglobin, 80 per cent; white blood cells, 16,800, with 88 per cent polymorphonuclears. Urine showed: specific gravity 1.012, a trace of albumin, an occasional granular cast, and a moderate number of spermatozoa. His deep reflexes were absent. He progressed rapidly, and took nourishment later in the day.

August 4, 1938.

The morning of the second day the patient's temperature was normal. He vomited once, vomitus containing bits of tomato and green peppers, eaten at the noon meal before his illness. The patient was rational, and gave a history of events before that time. Past medical history was entirely negative. No apparent memory loss. Only complaints at this time were: aching in all his muscles, and weakness. Non-protein nitrogen was 26.3 milligrams per 100 cubic centimeters of blood serum. Blood Wassermann and spinal Wassermann were reported negative.

August 5, 1938.

The third day the patient felt nauseated, so nothing was given by mouth, and that day he had three intravenous injections of 1000 cubic centimeters of 5 per cent dextrose in normal saline. His mind was perfectly clear, and a complete neurological examination was normal. His only complaint was a feeling of weakness. Temperature was 99 degrees, pulse 102, and blood pressure 122 systolic and 70 diastolic.

Following this the patient made an uneventful recovery, and was discharged from the hospital on August 10, 1938. At this time there was no evidence of any residual damage to the brain, and complete physical examination was negative. The patient was told to return to his previous job, but to do only light work for a week or so, and at no time become overheated.

October 15, 1938.

The patient was seen at this time for routine check-up. Apparently, he has fully recovered and has no residual damage or ill effects from his illness.

311 Shaffer Building.

## ACTINOMYCOSIS WITH SUBSEQUENT EXTENSION AND ABSCESS FORMATION

By STANLEY DOUGAN, M.D.

AND

ROBERT B. CRAGIN, M.D.

San Jose

**I**NFECTION of the human body by actinomyces is relatively common. The original portal of entry is probably the mouth. Naeslum has been able to isolate the aerobic, anaerobic, and combined forms from the normal mouth. Lord and Trevett were able to obtain the organism from dental scum or the contents of carious teeth. The buccal cavity being the portal of entry, vaginal invasion probably comes from the rectum via sanitary pad, toilet

tissue, etc. The organism has been found in the uterus, tubes, and ovaries.

## REPORT OF CASE

Mrs. D. M., age 49, was first seen by one of us on May 11, 1937. At that time she complained of a painful swelling in her back in the region of the sacrum. This had first appeared in October, 1936, accompanied by practically no pain and little febrile reaction. This original swelling had persisted about two months, and then disappeared almost completely. It reappeared about four months later and gradually extended outward over the right hip. One week before being seen the lesion pointed on the lateral surface of the right ilium. About 500 cubic centimeters of purulent material had drained from the lesion. Past history showed that some swelling and tenderness had occurred in the right inguinal glands a few months prior to the time the swelling appeared in the back.

*Physical examination* showed a moderately well nourished female. No pathology was found in the head, neck, or chest. All the teeth had been removed. No abdominal tenderness was present nor were any masses palpable. Examination of the area referred to previously showed a sinus opening over the lateral surface of the right iliac crest with a line of induration running backward to the lumbosacral area. Pelvic examination showed the viscera to be normal in size and position. No tenderness was present. Smears from the vagina were positive for actinomycetes. This was verified by the clinical laboratory. X-rays of the pelvis revealed an old ankylosed arthritis, involving the third, fourth, and fifth lumbar vertebrae and upper sacrum, apparently nonactive at the present time. Laboratory examination showed the following: white blood cells, 13,000; small lymphocytes, 16 per cent; monocytes, 5 per cent; eosinophils, 2 per cent; neutrophils, 77 per cent, of which 5 per cent were stabs; red blood cells, 4,480,000; hemoglobin, 75 per cent. Blood Wassermann was negative. Urinalysis showed only a trace of albumin.

*A working diagnosis was made:* "Deep abscess, etiology undetermined."

*Treatment.*—On June 17, 1937, the patient was taken to surgery and, under a general anesthetic, the abscess was opened and explored. The abscess and accompanying sinus tract extended from a point above the anterior crest of the right ilium back to the lumbar spine. There was no evidence of bone involvement. Many ramifications were present, some of which extended down to, but not through the peritoneum. Cultures were taken and sent to the laboratory. The tract was cleaned and packed with vaselin gauze.

Recovery from the operation was uneventful. The laboratory report on the smears was positive for actinomycotic granules. Postoperative treatment consisted of packing the tract regularly with vaselin gauze and exposing the unhealed areas to ultra-violet rays. Potassium iodid was given during the entire convalescence, the dosage being maintained at maximum tolerance. Because of the depth of the tract and the nature of the causative agent, healing was of necessity slow. On June 20, 1938, the patient was discharged, completely cured.

## COMMENT

Apparently, the focus of the infection was the vagina, with extension to the inguinal glands and then the back. The causative organism we believe to be actinomycetes.

## IN CONCLUSION

We feel that this case is of interest for the following reasons: First, the actinomycotic infection apparently extended from the vagina through the inguinal glands, forming the sinus tract that ultimately resulted in abscess formation. Second, complete healing of these deeply infected areas is unusual—so often we find sinus tracts remaining. Third, we feel that we were definitely able to determine the original location of the causative agent.

Medico-Dental Building.

CHANCROIDAL BUBO CURED BY  
SULFANILAMIDE

By J. F. DOUGHTY, M.D.  
Tracy

Mr. M. H., age 22, noted a "sore" on the glans penis about one week after intercourse. He came under my observation about four days later, at which time there was an ulcerated lesion completely destroying the frenulum, and extending into the superficial tissues of the glans penis. The inguinal glands were slightly enlarged. Darkfield examination for *Spirocheta pallida* was negative. Under treatment with mild antiseptic washes and dressings, the lesions healed very slowly. Two months later, with the lesions still not completely healed, the patient developed large inguinal buboes on the left side. The swelling was the size of a lemon, and there was redness of the skin around the area for a distance of about three inches. The swelling was hard and moderately tender. The patient's temperature was normal, but he felt sick.

Sulfanilamide was administered orally, 20 grains every four hours for four doses, and 10 grains four times daily, to a total of 250 grains. Within twenty-four hours the patient felt considerably better, and recession of the swelling was quite noticeable. At the end of five days the ulcer was entirely healed, and the glands were no larger than small walnuts. They continued to recede. There has been no recurrence.

In this case an ulcerated chancroid, which healed very slowly and developed buboes after two months, responded after the administration of sulfanilamide.  
231 West Eleventh Street.

TRICHINA SPIRALIS: ITS INCIDENCE  
IN NECROPSY MATERIAL\*

By E. M. BUTT, M.D.

AND

J. L. LAPEYRE, M.D.  
Los Angeles

ROUTINE examinations of human postmortem material for the presence of *Trichina spiralis* have yielded interesting information regarding the incidence of trichinosis. Percentages of infestation, ranging from 3.5 to 27.6, have been reported from widely separated localities. When it is realized that one-third to one-half of these patients probably have had clinical symptoms of the disease, a morbidity figure is obtained that is not only startling, but extremely important to the clinician and public health officials. In the papers of Queen,<sup>1</sup> Hall and Collins,<sup>2</sup> Riley and Scheffley,<sup>3</sup> Hinman,<sup>4</sup> McNaught

\* From the Laboratory of the Santa Fe Coast Lines Hospital, and the Department of Pathology, University of Southern California School of Medicine, Los Angeles.

<sup>1</sup> Queen, F. B.: The Prevalence of Human Infection with *Trichinella spiralis*, *J. Parasitol.* 18:128 (Dec.), 1931.

<sup>2</sup> Hall, M. C. and Collins, B. J.: I. The Incidence of Trichinosis as Indicated by Postmortem Examinations of Three Hundred Diaphragms, *Pub. Health Rep.*, Vol. 52, No. 16 (April), 1937. II. Some Correlations and Implications in Connection with the Incidence of Trichinae Found in Three Hundred Diaphragms, *Pub. Health Rep.*, Vol. 52, No. 17 (April), 1937.

<sup>3</sup> Riley, W. A., and Scheffley, C. H.: Trichinosis of Man—A Common Infection, *J. A. M. A.*, 102:1217 (April 14), 1934.

<sup>4</sup> Hinman, E. H.: Trichinosis in Louisiana, New Orleans M. and S. J., 88:445-448 (Jan.), 1936.

TABLE 1

Age	Total Number of Cases	Positive Cases		Per cent Positive		State of Trichina	
		Number	Per Cent	0-50 yrs.	51-100 yrs.	Cysts	Live Worms
10-20	8						
21-30	6						
31-40	25	6	24.0	15.8		3	5
41-50	24	4	16.7			3	1
51-60	40	6	15.0			5	2
61-70	35	8	22.8		19.6	7	1
71-80	25	6	24.0			6	1
81-90	7	1	14.2			1	
Total	170	31	18.2			4 Heavy Infestations 27 Light Infestations	

and Anderson,<sup>5</sup> and Magath,<sup>6</sup> are found complete discussions of the methods used, presentation of the statistics and summaries of the literature.

Inasmuch as no reports of the incidence of trichinae infestation in cadavers have appeared from Southern California, we thought it of interest to record our findings.

#### METHODS AND RESULTS

This study is based upon the examination of human diaphragms by the digestion method. The method used in digesting the muscle is essentially that described in the article by McNaught and Anderson.<sup>5</sup> The diaphragms were stripped free of fat, weighed, and ground in a meat grinder. Fifty grams of the ground muscle were mixed with 500 cubic centimeters of 0.7 per cent hydrochloric acid, and 1.5 per cent granular pepsin. The mixture was then agitated by means of a mechanical stirring device arranged within an incubator (37 degrees centigrade), and allowed to remain over night. The incubation period varied from fourteen to eighteen hours. The following morning the material was passed through brass mesh sieves, No. 40 and No. 60, and allowed to settle in a large glass funnel, to which was attached a rubber tube closed by a

pinchcock. The filters were rinsed several times with normal saline solution. After allowing the entire mixture to settle for one-half to two hours, small portions of the sediment were drawn off into a petri dish and examined under a microscope equipped with a 35-millimeter objective. Liberated trichinae and cysts were easily identified. In the event no trichinae were found, larger quantities of the sediment and washings from the apparatus were examined.

Diaphragms containing more than one hundred cysts or larvae were considered to be heavily infested. Not more than five to ten trichinae were found in the average case.

The results of the examination of 170 diaphragms are recorded in Tables 1 and 2. It will be noted that 18.2 per cent were found to be infested with either trichinae, cysts, or with both cysts and worms. Four of the thirty-one positive diaphragms were classified as heavily infested, while of the remaining twenty-seven diaphragms only one to ten trichinae were found in each instance.

Fourteen cases in the age groups from ten to thirty years were negative. In the remainder of the cases separated according to age, little variation in infestation was noted.

Further analysis of the data is presented in Table 2. It will be noted that there is a higher percentage of infestation in females than in the males. This is due to the higher incidence of trichinae in colored and Mexican females than in males of the same races. The differences in the percentage of infestation of white males and females are not significant.

Over 95 per cent of the diaphragms used in this study was obtained from the Los Angeles County Hospital. This fact, in addition to the variations in the degree of infestation in the colored and white groups of the series, may have an implication regarding the percentage of infestation in the population at large. The explanation for the higher percentage of positivity in colored and Mexican females, in comparison with the males of the same races, is not apparent. However, it is apparent that less discrimination is practiced by individuals of the latter groups in the selection and preparation of pork products.

It is interesting to point out that none of the past histories of the positive cases contained information upon which to base a diagnosis of trichinosis.

TABLE 2

	Total Number in Group	Number Infested	Per Cent Infested
<b>Males:</b>			
White .....	80	10	12.5
Colored .....	10	3	30.0
Mexican .....	23	4	17.3
Total .....	113	17	15.0
<b>Females:</b>			
White .....	38	4	10.5
Colored .....	7	4	57.1
Mexican .....	12	6	50.0
Total .....	57	14	24.5
<b>Males and Females:</b>			
White .....	118	14	11.8
Colored and Mexican .....	52	17	32.6
Total .....	170	31	18.2

<sup>5</sup> McNaught, J. B., and Anderson, E. V.: The Incidence of Trichinosis in San Francisco, J. A. M. A., 107:1446-1448 (Oct. 31), 1936.

<sup>6</sup> Magath, Thomas B.: Encysted Trichinae, Their Incidence in a Private Practice and the Bearing of This on the Interpretation of Diagnostic Tests, J. A. M. A., 108, No. 23 (June 5), 1937.

In the histories in which blood studies were recorded, the eosinophile counts were within normal limits.

It is quite apparent from the foregoing data that trichinosis is as prevalent in Los Angeles as it is in other cities in which surveys of trichinae infestation in cadavers have been made. This information becomes even more startling when the percentages of infestation are transferred from the dead to the living. The droll implication is that nearly one-half million residents of Los Angeles County eat undercooked, infected pork, and carry worms in their muscles.

#### SUMMARY

1. Eighteen and two-tenths per cent of diaphragms examined by the digestion method were found infested by *Trichina spiralis*.

2. The percentage of infestation is much higher in Mexicans and colored people than in the white population.

3. Four of the thirty-one positive diaphragms were found to be heavily infested.

4. A definite clinical history of trichinosis was not found in any of the positive cases.

University Park.

### HUNNER'S ULCER AS AN UNSUSPECTED CAUSE OF GASTRO-INTESTINAL SYMPTOMS

By FRED H. KRUSE, M.D.

AND

WALTER W. HERRMANN, M.D.  
San Francisco

IN 1914 Hunner<sup>1</sup> reported, before the Southern Surgical and Gynecological Association, a series of eight cases having a hitherto undescribed lesion of the urinary bladder. These cases all occurred in women, since his practice was so limited. At the time, however, he predicted that the lesion also occurred in men, and since then this has been reported.

This lesion is characterized by intractable bladder pain, frequency and burning on urination, a low bladder capacity, and paucity of changes in the chemical, microscopic, and bacteriologic study of the urine. The cystoscopic examination, unless carefully done with this lesion in mind, is frequently reported as negative, and half the women in Hunner's group had been subjected to extravesical surgery before the lesion was recognized.

The cystoscopic picture consists of very minute ulcerations through the mucosa, 1 to 5 millimeters in diameter. These are surrounded by radiating, dilated capillaries, and a zone of edema 4 to 5 centimeters in diameter. The ulcerated area bleeds readily if the bladder is overdistended, or is touched by instrument or cotton pledget.

The tissue changes consist of a small zone of epithelial destruction, with regeneration around the margins of the ulcer. The underlying submucosa shows extensive fibroblastic proliferation, an increase in the number of capillaries, and infiltration with inflammatory cells over a zone much wider than the ulceration. The inflammatory cells are chiefly polymorphonuclear, but mononuclear cells are present in abundance.

Urinary examination shows little to account for

the cystitis, at most a very few red blood cells; although the patient will have noted, in some instances, some blood in the urine. Cultures of the urine have been consistently negative, and search for tubercle bacilli has been fruitless.

The tissue changes present have given the lesion the aptly descriptive name of submucous fibrosis of the bladder.

While the typical symptomatology leaves no doubt as to the site of the disturbance, there are occasional cases, exemplified by the fourth case of Hunner's series and the one here reported, in which the presenting complaints and symptoms are misleading.

#### REPORT OF CASE

A 58-year-old white housewife was first seen in September, 1937, complaining of abdominal distention with gas, belching, and flatulence. Accompanying the distention there was severe vaginal pain and urinary frequency. Her symptom-complex started with the abdominal discomfort which came immediately after or during meals, and produced the intolerable pain in the vagina. The symptoms had been present for four years, and she was accustomed to being forced to hurry from the table during this period of time in order to relieve herself of accumulated rectal gas and thus ease her pain. If this was not successful she would resort to enemas or sitz baths. The pain occurred so promptly after the ingestion of any food and most liquids that she was undernourished, very nervous, apprehensive, and afraid to eat.

She gave a story of lifelong constipation, with the habit of regular, frequent use of the enema tube because the use of cathartics and their resultant cramping aggravated the intense vaginal pain. There was no rectal pain and no burning on urination. Her sole urological complaint was frequency, which she stated always came and was made worse with the accumulation of gas in the bowel. Her past history and inventory of systems were not relevant.

The positive findings in the physical examination were: a small, undernourished, pale, apprehensive woman. Weight, 94½ pounds; height, 59 inches. The turbinate bones were large and covered by reddened, thick mucous membrane. The tonsils were large and showed moderate infection. The mouth was edentulous, the last teeth having been removed some three months previously because of infections. The heart was small, rate 92 with a slightly impure, first sound and a faint systolic murmur. The blood pressure was 162/100. The peripheral vessels were slightly sclerotic. There were a few, diffuse, sibilant squeaks throughout the lung fields, which were thought to be atelectatic in origin. The abdominal wall was relaxed, with moderate distasis of the recti muscles. There was much crepitus and gurgling of gas on manipulation of the abdominal contents. The wall was held semi-rigid, and the ascending and descending portions of the colon could be felt as contracted, firm cords. The rectal sphincter was spastic and the pelvic examination revealed nothing of note. The urine showed a faint trace of albumin, five to seven pus cells and two to five red blood cells per high dryfield. Blood count showed a secondary anemia.

Roentgenological examination of the gastro-intestinal tract showed evidence of colon irritability and a questionable filling defect in the rectosigmoid junction, which has since been shown to fill out.

After three weeks' trial on carefully outlined and faithfully executed colon management, she reported back with no relief of symptoms. At that time she was referred for a study of the urinary tract. The cystoscopic investigation revealed a submucous fibrosis in the vault of the bladder, which was then cauterized. When seen three days later there was still some slight urethral irritation, but practically all of the agony she had suffered for four long years had subsided. In three weeks' time her only symptoms centered about the constipation. In three months' time her weight had increased by ten pounds, and this has been maintained at that level since. There have been several recurrences of the bladder symptoms, necessitating repeated fulguration, which is a typical story of Hunner's ulcer. Between fulgurations, however, she has continued to enjoy reasonable comfort and health.

384 Post Street.

<sup>1</sup> Tr. South. Surg. & Gynec. Assoc., 27:247, 1914.

## BEDSIDE MEDICINE FOR BEDSIDE DOCTORS

An Open Forum for brief discussions of the workaday problems of the bedside doctor. Suggestions of subjects for discussions invited.

### HERPES ZOSTER

#### I. ETIOLOGY

SAMUEL AYRES, JR., M.D. (2007 Wilshire Boulevard, Los Angeles).—Herpes zoster belongs in the group of virus diseases and, etiologically, is in the same category with variola, varicella, anterior poliomyelitis, encephalitis, herpes simplex, verruca, molluscum contagiosum, etc. A considerable amount of investigation has been done which points to the probability that the virus causing herpes zoster, and that causing varicella, are either identical or very closely related, and differ from the virus causing herpes simplex. R. T. Brain pointed out that the serum of persons convalescent from zoster and varicella contains specific antibodies which can be demonstrated by complement-fixation, using the vesicle fluid as antigen. According to Brain, fluid from zoster vesicles gives equally good fixation with zoster and varicella serum, and the same is true of the fluid from varicella vesicles. This work confirms similar findings of Netter and Urbain. C. R. Amies called attention to the fact that "elementary bodies" (cell degeneration products), morphologically similar to those found in varicella and vaccinia, are constantly present in the fluid from the vesicles of zoster. He demonstrated that pure suspensions of these bodies, prepared by high speed centrifugation of fluid from the vesicles, are specifically agglutinated by zoster convalescent serum. Attempts to demonstrate a relationship of zoster and varicella by means of cross-agglutination tests have met with a fair measure of success. Both Kundratitz and Bruusgaard were able to cause varicella by inoculating children with the vesicle fluid from cases of herpes zoster.

Bokay, in 1888, first called attention to the possibility of a relationship between herpes zoster and varicella, and since then many clinical observations have tended to confirm this idea. As stated by Andrews, "the usual circumstances are that a case of herpes zoster is followed in fourteen to sixteen days by outbreaks of varicella in associated persons who have not, so far as is known, been otherwise exposed to varicella infections."

Wise and Sulzberger conclude that "it, therefore, seems possible that zoster is an eruption of altered type, a relatively immune or allergic type of chickenpox, which occurs in those whose tissues have been specifically changed in their capacity to react through previous acquaintance with the same virus (allergy). This previous acquaintance may have led to preceding clinical disease (in the form of chickenpox, perhaps many years previously) or may have been subclinical, as is the case in many instances of other diseases (diphtheria, poliomyelitis, etc.)."

"This hypothesis, which requires confirmation through adequate study and experimentation, would explain why, as a rule, (1) herpes zoster is rare in children; (2) chickenpox is rare in adults; (3) inoculation of the virus of a case of chickenpox produces chickenpox in children and zoster in adults; and (4) the zoster vesicle virus produces chickenpox in children and zoster in adults."

Practically nothing is known regarding the usual mode of transmission of the virus of zoster. The disease must be very feebly contagious, inasmuch as it is quite uncommon for more than one member of a family to be affected, although a number of such occurrences are on record. The virus certainly must in some manner find its way to the posterior or sensory nerve root, as indicated by the following observations: (1) Inflammatory and degenerative changes have been found in the posterior nerve roots or root ganglia; (2) spinal fluid changes with increased pressure have been demonstrated; (3) pain usually precedes the eruption; (4) the eruption is usually centrifugal in its development.

The disease is thus a posterior poliomyelitis, and yet inoculation experiments with vesicle fluid clearly indicate that the virus must travel along the nerve and finally appear in the skin. The claim has also been made that the virus may appear first in the skin and travel along the nerve toward the spine, but this is probably not the usual course of events.

The fact that many cases of zoster have closely followed trauma, such as back injuries, spinal puncture, spinal manipulation, etc., suggests that the clinical picture of herpes zoster may be produced by mechanical means. Zoster has also been reported as being caused by chemical poisons, such as arsenic, streptococci from foci of infection (Rosenow and Oftedal), malaria, septicemia, spinal-cord tumors, tabes, springomyelia, leukemia, etc. The occurrence of zoster in connection with the above-mentioned conditions does not prove, however, that such eruptions are not of virus etiology. Such extraneous factors may have served merely to lower the resistance, thereby allowing a latent virus infection to manifest itself in the same way that exposure to the sun or a bad cold, by lowering the resistance either locally or generally, allows a latent herpes simplex to flare up. The virus etiology of herpes simplex can be easily demonstrated by animal inoculation with vesicle fluid, even when precipitated by physical agents; whereas the virus in the vesicle fluid of zoster is not readily transmissible to animals, although, as mentioned before, it can produce either zoster or varicella on human inoculation. Inoculation experiments with vesicle fluid from cases of zoster apparently of traumatic origin would be interesting.

The virus of herpes zoster generally stimulates the development of an immune state, so that the disease is self-limited and usually does not recur. This is a strong argument for the differentiation of zoster virus from the virus of herpes simplex where no immunity is established. The difference in behavior of the two viruses on animal inoculation is further evidence of the separate nature of the two viruses.

\* \* \*

## II. DIAGNOSIS

STANLEY O. CHAMBERS, M.D. (826 Roosevelt Building, Los Angeles).—Herpes zoster presents such characteristic features that it is one of the easiest of all cutaneous diseases to recognize. A unilateral eruption, consisting of groups of rather large vesicles upon an erythematous base, following the course of cutaneous nerves and accompanied or preceded by neuritic pains, is characteristic of herpes zoster. If one has the good fortune to always have ready these cardinal features, little or no difficulty should be encountered in diagnosis. Often, the preceding neuritis represents the only diagnostic evidence—and, although a conclusion cannot be drawn, it is generally good judgment to observe for herpes zoster any unilateral pain following the course of a cutaneous nerve. Erythematous patches may soon appear with their characteristic, superimposed vesicles. Preceding neuralgic pains usually announce the skin lesions to follow. Characteristic skin lesions of herpes zoster can develop, however, with little or no pain preceding their appearance. Pain is variable at the onset, and may vary from a negligible degree to the severity of a passing ureteral stone or acute mastoiditis. Surgical errors have been made during this phase of the disease. The cutaneous lesions are comprised of two elementary ones, erythematous patches and vesicles superimposed. Although these two phases are distinct in development, the time interval between is never great. The degree of definition of both phases is variable. The erythematous patches may be very indefinite or extremely prominent. Likewise, the vesicles may be large and numerous or small and few. Never, however, are either of these two phases insufficient to avoid clinical detection. The erythematous patches, with their superimposed, grouped vesicles, follow accurately the distribution of the nerve or nerves affected. The most frequent regions affected are those supplied by the intercostal, lumbar and trifacial nerves, although any portion of the cutaneous surface may be involved. The enlargement of adjacent lymph glands, although not always found, represents a rather consistent and diagnostic feature. These glands share in the inflammatory phase of the disease and are seen at the onset of the cutaneous lesions, slowly subsiding in relation to the involution of the acute phase of these lesions. The neuralgic pain usually preceding the eruption may persist throughout the course of the disease, with more or less severity, and may too frequently persist for months following the complete healing of the cutaneous lesions (postzoster neuritis). Rarely ex-

perienced is the development and healing of herpes zoster without pain.

This is, indeed, in contrast to the usual development of herpes simplex without pain, and represents a differential feature. Severe pain is an expected accompaniment and usually represents the outstanding treatment problem. In the course of the disease the vesicles which do not tend to spontaneous rupture dry upon the skin as yellowish-brown crusts and fall off.

Then here again the ready tendency to early rupture of its superficial vesicles is characteristic of herpes simplex. The entire pathologic process may be so slight as to leave no sequelae at the site of the healed lesions.

This is consistently true of herpes simplex, but in herpes zoster the degree of severity may vary: the simple vesicles may become purulent, hemorrhagic, or gangrenous. The duration of the disease and the cutaneous sequelae may likewise vary. Three to six weeks might elapse from onset to healing, and extensive deep scarring result. It is of diagnostic importance to observe that severity, duration and sequelae appear more extreme in older individuals and less so in young ones. Prognosis, therefore, where the disease involves specialized structures, can from this observation be better interpreted. The disease is self-limited, varying in duration from one to five weeks. It is no more common in men than in women. It affects the elderly more commonly than the young. Histopathologic evidence, although presenting characteristics common to herpes zoster, smallpox, and chickenpox, is rarely used in diagnosis.

Differential diagnosis should not be confusing in unilateral herpes zoster. Where the disease expresses itself bilaterally or as a generalization, however (herpes zoster generalizata), differential problems might arise; but, fortunately, this is extremely uncommon.

The sudden onset of unilateral pain, followed by the development of grouped vesicles on an erythematous base along the distribution of cutaneous nerves, should always serve to identify herpes zoster without difficulty.

\* \* \*

## III. TREATMENT

MERLIN T.-R. MAYNARD, M.D. (407 Medico-Dental Building, San Jose).—Since a discussion of treatment of this disease is to be found in textbooks of general medicine as well as dermatologies, it is my intention to give a résumé of my own preferences and routine procedures. The case of herpes zoster, after being questioned in relation to possible sensitivity to iodine and considered from the standpoint of age and physical condition particularly as regards hypertension or arteriosclerosis, is, if regarded as a good risk, treated as follows: One or two grams of sodium iodide are given intravenously. One cubic centimeter of surgical pituitrin is mixed with five cubic centimeters of whole blood, and injected intramuscularly. This treatment is repeated daily for three days, and every second day after that if necessary.

The above treatment is chosen to make use of the exudate absorption effect of sodium iodid with the vasoconstrictor effect of pituitrin. The whole blood is used to delay the absorption of the pituitrin and prevent the annoying peristaltic activity which would otherwise be considerable. All three of the above agents have been advised by different authors, and I have used them individually as well as together.

I have seen abortive effects from sodium iodid in early cases. Pain is often not relieved by sodium iodid. It is often dramatically relieved by pituitrin, and less often by autohemotherapy. I believe the combination of the above three treatments to be the most effective routine for the average case.

Recently, vitamin B has been widely used internally, with various reports of success; however, it has also been apparently a causative factor in one author's experience.

Local treatment is often not necessary, aside from protection and antisepsis. Spraying with ethyl chlorid has been useful in relieving local pain, as has also painting with collodion. Dry heat is helpful. Powders and drying lotions are also recommended. Ointments are not used in the treatment of zoster *per se*, but only to control secondary infection. If the case is seen late, and gangrene and sloughing are present, the indication is one of control of infection. Gentian violet, compresses, and antiseptic ointments, such as 5 per cent ammoniated mercury, are all used according to usual practice in infected wounds. The sloughing skin is trimmed away as it separates.

"After Pain." An unfortunate and regrettable occurrence, particularly in the aged, is the matter of "after pain." This may be neuralgic or of the intense burning sympathetic type. I believe that sodium iodid therapy helps to prevent this complication. If the pain is of the neuralgic type, section of the nerves involved is helpful. If of the sympathetic burning type, section of the sympathetics is accomplished by tying and severing the larger blood vessels leading to the area. Relief is usually partial and not complete. In one case in my experience of the ophthalmic distribution, cocaineization of the sphenopalatine ganglion gave temporary relief. Alcohol injection was not done, due to the poor condition of the subject. "After pain" may persist for only a few days, but often continues for months or years. It is commonly of such severity that morphia or dilaudid is needed, and the patient may seek relief in suicide.

---

*Teaching of Night-Driving Technique Is Urged by Journal.*—Teaching of night-driving technique as a part of the initial training of motorists is advocated by *The Journal of the American Medical Association* in an editorial, "Motor Accidents at Night," in its April 8 issue.

"Numerous accidents at night on the highways continue to indicate the need of more adequate supervision of traffic," the editorial says. "Whereas the enforcement of traffic laws has heretofore been mainly a day-time activity, many cities are now placing policemen on streets to handle traffic during the dark hours. Most motorists obtain their experience and training under daylight conditions; the problems that arise at night have not been sufficiently impressed on drivers, and traffic engineering has not kept pace with the

situation. The fatal motor accident rate at night, on the basis of traffic, is more than three times the accident rate during daylight.

"Motor-vehicle fatalities during the hours of darkness have increased 43 per cent since 1930. The entire increase in traffic deaths in 1937 over those in 1936 resulted from the increase in night accidents. However, the recent emphasis on safe driving at night is producing results. The Committee on Night Accident Hazards of the National Safety Council reports for the first six months of 1938 a reduction of 26 per cent in the motor fatalities occurring during dusk and darkness.

"In its analysis of the problem the committee finds that eyesight, driving experience, and mental attitude are the important factors in the driver himself. He, too, is responsible for the associated problems of intoxication, speed, fatigue, and age. The committee found that 78 per cent of the accidents in which the driver had been drinking occurred between 6 p. m. and 6 a. m. Further studies on intoxication as related to driving accidents are under way. Night driving involves a different technique from day driving because of the difference in visibility and in the reactions of the driver. Motorists should be taught night-driving technique in their initial training. Much can be done to eliminate the hazards which are the result of low visibility at night. Highway officials should insist on the best design and maintenance of highways with adequate signs and warnings designed for good visibility at night. An improved type of lighting the highways is being installed in many places throughout the United States. The most common method of lighting the road is by means of headlights. Unfortunately, the possibilities in head lamps on cars have not been developed as rapidly as those of other parts of the car. Headlights lose as much as half of their original effectiveness in a short time unless they are kept clean and adjusted. The committee recommends that officials consider the importance of securing adequate visibility for night driving and promote safety through the installation of good illumination for the heavily traveled and dangerous main highways and by the installation of flood lights at such hazardous locations as railroad crossings, intersections, and special entrances.

"Recently the Michigan Highway Department studied the use of reflector buttons on rural highways. Units were spaced 100 feet apart and 8 feet from the edge of the pavement on eighty miles of road between Lansing and Detroit. In the first three months of 1938 there was a reduction of 79 per cent in accidents on this stretch of highway, whereas on a control stretch of highway the reduction was only 19 per cent.

"The night pedestrian is susceptible to accidents. Night pedestrian fatalities in Philadelphia increased from 56 per cent of the total number of night fatalities in 1935 to 73 per cent in 1937. In New Jersey, in 1936, 67 per cent of the urban pedestrian fatalities and 83 per cent of the rural pedestrian fatalities happened at night. The committee urges that the pedestrian give the motorist every possible opportunity to see him. If it is necessary to walk at night in rural districts the pedestrian should carry a light when practicable and wear light-colored clothing. Even carrying a white handkerchief is a considerable aid. Because the pedestrian sees the motor's headlights does not mean that the motorist sees him.

"The night limits the speed for safe driving. The National Conference on Street and Highway Safety recently fixed forty-five miles an hour as the *prima facie* speed limit at night in sections where the corresponding day limit is fifty miles an hour. Lower speeds are necessary in many places. Drivers should lower the speed at night in order to keep their safe stopping distance within the range of clear visibility. Safe driving at night is a challenge to the ingenuity of the driver, who must be alert for every indication of objects ahead or changes in the road."

# CALIFORNIA MEDICAL ASSOCIATION

This department contains official notices, reports of county society proceedings and other information having to do with the State Association and its component county societies. The copy for the department is submitted by the State Association Secretary, to whom communications for this department should be sent. Rosters of State Association officers and committees and of component county societies and affiliated organizations, are printed in the front advertising section on pages 2, 4 and 6.

## CALIFORNIA MEDICAL ASSOCIATION†

WILLIAM W. ROBLEE.....President  
CHARLES A. DUKES.....President-Elect  
LOWELL S. GOIN.....Speaker  
KARL L. SCHAUPP.....Council Chairman  
GEORGE H. KRESS.....Secretary-Treasurer

### OFFICIAL BUSINESS ASSOCIATION ACTIVITIES

1. American Medical Association, Official Call: Annual Session.
2. California Medical Association: Sixty-Eighth Annual Session.

### DEPARTMENT OF PUBLIC RELATIONS

1. On California's Proposed Compulsory Health Insurance Law (A. B. 2172).
2. General Hospitals and the Wagner Bill.
3. Orange County Medical Society Circularizes Employers of Labor.
4. Compulsory Health Bills.
5. Assembly Bill 2172 and Senate Bill 1128.
6. Some Objections to Senate Bill 1128 and Assembly Bill 2172.
7. California Physicians' Service.

### AMERICAN MEDICAL ASSOCIATION

#### Official Call: Annual Session

To the Officers, Fellows and Members of the American Medical Association:

The ninetyeth annual session of the American Medical Association will be held in St. Louis, Missouri, from Monday, May 15, to Friday, May 19, 1939.

The House of Delegates will convene on Monday, May 15.

The scientific assembly of the Association will open with the general meeting, held on Tuesday, May 16, at 8:30 p. m.

The various sections of the scientific assembly will meet on Wednesday, May 17, at 9 a. m. and 2 p. m. and subsequently according to their respective programs.

IRVIN ABELL, *President.*

H. H. SHOULDERS, *Speaker, House of Delegates.*

Attest:

OLIN WEST, *Secretary.*  
Chicago, March 25.

### CALIFORNIA MEDICAL ASSOCIATION: SIXTY-EIGHTH ANNUAL SESSION

The May issue of CALIFORNIA AND WESTERN MEDICINE will be in press at the time the California Medical Association will be in session (May 1 to 4).

In this issue of the OFFICIAL JOURNAL it is only possible to list the names of newly elected officers and to present the address of the retiring president, William W. Roblee, M.D. Full reports will appear in the June issue.

† For complete roster of officers, see advertising pages 2, 4, and 6.

## C. M. A. DEPARTMENT OF PUBLIC RELATIONS†

### ON CALIFORNIA'S PROPOSED COMPULSORY HEALTH INSURANCE LAW (A. B. 2172)

Recently, the secretary of the California Medical Association Department of Public Relations wrote to friends in the East, requesting comments on certain phases of A. B. 2172, now before the California Legislature. Reply follows:

April 5, 1939.

Dear Doctor Kress:

To comply with your request for information concerning the probable outcome of the proposed amendment to the Unemployment Reserves Act would require considerably more time than the few days allowed. Enclosed is an analysis of the Sickness Insurance Bill sponsored a few years ago by the American Association for Social Security, which probably contains the type of information you want. The statistical data in the "Supplementary Information" of this analysis indicate the type of calculations that are necessary.

The following is also offered as some help in answering your specific questions:

1. Enclosed are two lists of studies of physicians' income showing the median and average income during the past several years. Also enclosed is a clip sheet from *The Journal* of the latest report by the Department of Commerce. From these several studies you will be able to approximate the average or median income of physicians. A recent study by the National Bureau of Economic Research concludes that during the period of 1929 to 1934 the incomes of physicians averaged \$4,100 annually.

2. You will notice that these lists of the studies of physicians' incomes include the study by the San Diego County Society for 1933 and the California Economic Survey for the period 1929 to 1934. These studies give some hint of the level of physicians' incomes in the State of California.

3. In regard to this question it might be first observed that the proposed amendment undertakes to include all persons in employments as defined in Section 6.5 and Section 7 of the Unemployment Reserves Act with the two exceptions specified in Section 153 of the proposed amendment. The scope of the amendment in designating the persons from whom contributions may be expected, to be paid either by the worker, the employer, or later by the State, is so wide that it would virtually include all persons in the State of California. However, your question "How many citizens in the State of California would come in the group of annual salaries between \$840 and \$3,000 per year?" can be answered to a certain extent. We take it you mean residents of California, not necessarily citizens.

A study by Margaret Kelm, "Medical Care and Costs in California Families in Relation to Economic Status," published by the State Relief Administration of California in 1935, includes an analysis of the incomes of selected samples of 5,096 low-income and wage-earning white families in California. From this selected sample it appears that 60 per cent of low-income and wage-earning white families in California would be included in the income class of \$840 to \$3,000 per year, according to present income levels. While the very poor sections and the very rich sections of the area surveyed were excluded, it may be that this

† The complete roster of the Committee on Public Relations is printed on page 2 of the front advertising section of each issue. Dr. George G. Reinle of Oakland is the chairman, and Dr. George H. Kress is the secretary. Component county societies and California Medical Association members are invited to present their problems to the committee. All communications should be sent to the director of the department, Dr. George H. Kress, Room 2004, Four Fifty Sutter Street, San Francisco.

*Estimated Contributions Under the Proposed California Social Insurance Act, an Amendment to the Unemployment Reserves Act.*

Income Class (Annual)	Estimated Income* (Thousands)	EMPLOYEES		EMPLOYERS		STATE	
		Tax (Per Cent)	Contribution (Thousands)	Tax (Per Cent)	Contribution (Thousands)	Tax (Per Cent)	Contribution (Thousands)
0-\$ 840	\$ 588,000	---	---	2	\$11,760	1	\$ 5,880
\$ 840- 1,200	637,000	1 1/2	\$ 3,185	1 1/2	9,555	1	6,370
1,200- 2,400	1,666,000	1	16,660	1 1/2	24,990	1 1/2	8,330
Over 2,400	2,009,000	1 1/2	30,135	1	20,090	1 1/2	10,045
	\$4,900,000		\$49,980		\$66,395		\$30,625

\* According to data in "America's Capacity to Consume," The Brookings Institution, pages 174 and 207, corrected according to United States Department of Commerce estimates of income in the United States.

Total estimated contributions equal \$147,000,000, or 3 per cent of the total income of \$4,900,000,000.

percentage distribution of family income would be somewhat representative of the majority of California families.

The California Medical-Economic Survey, with its records for 4,882 white families interviewed during an approximate year, 1934, also gives some indication of the income status of Californians. According to this study, 55 per cent of the families fell within the income group of \$840 to \$3,000.

From general studies of the distribution incomes, such as the reports of the Brookings Institution, the National Industrial Conference Board, and the Department of Commerce, it would seem that no fewer than 75 per cent of the individual persons and 69 per cent of all families would be included in the income group earning between \$840 to \$3,000 per year, in California.

4. In regard to your fourth point, it should not be overlooked that the proposed amendment undertakes to provide service benefits for all persons earning under \$3,000 and not just the group earning between \$840 to \$3,000. Likewise, disability unemployment benefits and so-called reimbursement benefits are payable to persons earning more than \$3,000 per annum. Disability unemployment benefits are also payable to persons earning less than \$3,000 per annum. Consequently, it would appear that at least 90 per cent of the entire population would be eligible for some benefits under the proposed amendment.

5. The nearest possible estimate that could be made of the income in California from salaries and wages is \$4,900,000,000. This is based on the geographic distribution of personal income from occupations as reported by the Brookings Institution for 1929, corrected to the level of income for 1937 according to the reports of the Department of Commerce.

It is impossible to know the number of persons who would be taxed under the proposed amendment or their incomes, but assuming that the total income from salaries and wages would be taxable under the amendment, the computation would be about as indicated in the accompanying table. It cannot be emphasized too much that all such computations are simply approximations, but it is believed that results are somewhat indicative of what may be expected. As shown in this table, the total money collected on and after July, 1941, would be approximately \$147,000,000, or 3 per cent of the total income from salaries and wages. The contribution that employees, employers, and the State would probably make are shown in the table.

6. It is impossible to hazard a guess as to the average gross income that would accrue to the physicians under the proposed Social Insurance Act. The total fund collected under the Act must be used for so many diverse benefits that it is impossible to know the amount that would be left for payment to physicians. Notice that out of the estimated \$147,000,000 the benefits are payable for six categories of service benefits, one for maternity cash benefits and one for reimbursement benefits.

Particular attention should be called to the provision providing for disability unemployment benefits. The interdepartmental Committee estimated that the cost of a disability compensation program would be 1 per cent of wages. Hence the disability unemployment benefits alone would require one-third of the total contributions.

Administrative costs would probably be not less than 15 per cent, if not more.

The probable cost of the benefits for hospitalization, drugs, medicines, and laboratory services is most uncertain, but would not be less than 25 per cent.

The cost of the reimbursement and maternity benefits cannot even be estimated.

However, from the foregoing it should be evident that the amount that would be left for payment to physicians would indeed be small. Which of the benefits would take preference cannot be determined from the amendment, but it seems fairly certain that the total contributions amount to but three per cent of the wages and salaries and will not be sufficient to provide for the grandiose system of benefits promised.

In regard to reimbursement benefits, it is rather curious that individuals earning more than \$3,000 are considered as capable of spending their own money to obtain medical services but that persons earning less than \$3,000 per year must have a paternalistic medical organization arranged for their medical services. It is not believed that the persons falling in this latter category would not want to be considered as unable to make their own purchases.

We trust that the foregoing will be of some help to you in your consideration of the proposed Social Insurance Act. Again it should be emphasized that all of the foregoing has been hastily prepared and should be considered as suggestions rather than as conclusions. . . .

#### GENERAL HOSPITALS AND THE WAGNER BILL\*

Section 1201 of the Wagner Bill, Senate 1620, authorizes the appropriation in successive years of eight, fifty, and one hundred million dollars, respectively, for the construction and improvement of general hospitals. Under Section 1203 (a) (1), financial participation by the states is required. Naturally the extent of this participation will vary from state to state. Assuming, however, that the contributions of the Federal Government will be on a fifty-fifty basis, there will be available for the construction and improvement of government-owned general hospitals \$16,000,000 in the fiscal year ending June 30, 1940, \$100,000,000 in 1941, and \$200,000,000 in 1942. Taking \$4,000 as the average cost per bed of general hospitals, this bill would make provision for the addition of 4,000 general hospital beds in 1940, 25,000 general hospital beds in 1941, and 50,000 general hospital beds in 1942. These figures relate only to government-owned hospitals and do not include such enterprises, public or private, as may be undertaken without a Federal subsidy. Over an eleven-year period, 1928-1938 inclusive, the average annual increase in the number of beds in general hospitals was 1.9 per cent. The increases in number that are proposed in the Wagner Bill amount to a total of 79,000 beds, 16.2 per cent, in three years, or an average rate of increase of 5.4 per cent. In 1938 the general hospitals of the country were filled to 68.9 per cent of their capacity; 31.1 per cent of the beds were unused. Wherein lies the justification of the proposal to multiply threefold the normal increase of hospital facilities?

#### ORANGE COUNTY MEDICAL SOCIETY CIRCULARIZES EMPLOYERS OF LABOR

Text of the circular letter:

TO EMPLOYERS OF LABOR:

*Increased Taxes, Increased Bookkeeping,  
Increased Overhead*

There are before our legislators two Administration COMPULSORY Health Insurance bills (Assembly Bill No. 2172 and Senate Bill No. 1128). These bills provide that a

\* Concerning Wagner Bill, see page 380.

tax, the major portion of which is paid by employers (based upon employees' salaries) be levied to provide employees and their dependents with medical, surgical, hospital, dental, drug and nursing services under political dictation.

This will mean another heavy expense to the employer. Taxes are high enough today without this unnecessary increase. These bills provide for another European experiment in social economics. They are dictatorial, un-American, political, regimental, and apparently un-Constitutional.

The Senate hearing occurs on April 4 and 5. If you do not want an increase in your pay-roll, bookkeeping and overhead, write or wire your Assemblyman to VOTE NO on Assembly Bill No. 2172, and your Senator to VOTE NO on Senate Bill No. 1128. Also send a copy of your letter or wire to Governor Olson.

Protect your employee's right to choose his doctor.

THE EXECUTIVE LEGISLATION COMMITTEE,  
ORANGE COUNTY MEDICAL SOCIETY.

### COMPULSORY HEALTH BILLS

The Public Health League of California on April 6, 1939, issued an interesting circular under the following captions:

#### DANGER!

KEEP EUROPEAN REGIMENTATION OUT OF CALIFORNIA

Stop Assembly Bill 2172; Senate Bill 1128

Prevent Medical Dictatorship!

"Isms" Won't Work in America!

Text of the circular follows:

Assembly Bill 2172 and Senate Bill 1128 provide a system of socialized compulsory medical care which originated in Germany. Despite the failure of this plan there and elsewhere, some California politicians are trying to subjugate the working people of this state to the same galling yoke of public medical care at an estimated cost of \$70,000,000 a year, much of which would be deducted from employees' pay rolls!

Under the "panel service" plan contained in A. B. 2172 and S. B. 1128 the present confidential relationship of doctor and patient would be destroyed. Your intimate personal and family medical records would become public property!

In Europe, where compulsory medicine is the law, doctors frequently examine thirty patients in an hour—an average of two minutes to each patient. Do you want to be herded like cattle when illness takes you to a doctor's office?

You have paid large sums to the Unemployment Reserve Fund. These funds are held in trust for you to provide bare necessities in case of another economic depression—The proponents of these bills propose to use unemployment funds—thus diverting your reserve funds for more political jobs. Do not allow tampering with your Unemployment Reserve Funds. Cash disability benefits could be given now from these funds without saddling the state with a tax-eating system of compulsory medical care.

Staggering tax burdens and vast bureaus of government employees have been the net results of compulsory medical care in Europe. S. B. 1128 and A. B. 2172 propose to start in California by deducting up to 1½ per cent of the salary of every worker (except those earning \$70 a month or less) making up to \$3,000 a year. These bills provide taking 2 per cent of the total payroll in this classification from the employers also. In addition, conservative estimates place the remaining cost to the state at \$36,000,000 a biennium—and you would pay this huge amount in taxes, too!

Write or telegraph your state senator or your assemblyman, or both, to vote No on A. B. 2172 and S. B. 1128. (Your local newspaper can give you the names of your senator and assemblyman. Address both at State Capitol, Sacramento.)

Compulsory Medical Care has been repudiated in New York, New Jersey, Massachusetts and other states after careful and thorough investigation.

The people of California don't want it!

The doctors of California don't want it!

Investigation of those supporting A. B. 2172 and S. B. 1128 show that those who do want compulsory medical care are almost without exception politicians—these bills would create thousands of political jobs at our expense.

It would not help indigents—they get free medical care. It would not help the wealthy (those making over \$3,000 a year), as they would not be included in compulsory care and would continue with their own doctors anyway.

It would not help the salaried man who would pay the taxes, lose his present personal relation with his physician and become one of the crowd rushed through the panel doctor's office.

Write your senator and assemblyman to vote No on A. B. 2172 and S. B. 1128.

Have your friends do likewise.

PUBLIC HEALTH LEAGUE OF CALIFORNIA

Issued April 6, 1939

### ASSEMBLY BILL 2172 AND SENATE BILL 1128

#### Informative Bulletin—A

#### 1. By Whom Sponsored.

Assembly Bill 2172 and its companion, Senate Bill 1128, are said to be "Administration" Bills. According to the newspapers, these bills are sponsored by and supported by Labor's Non-Partisan League and "a number of Liberal organizations."

#### 2. Why the Tie-In with Unemployment Funds?

They establish a system of health insurance within the system of Unemployment Reserves. There is now \$130,000,000 reserve in the Unemployment Fund contributed by employers and workers as a sacred trust against unemployment. This new scheme plans to tap this unemployment reserve fund and use it for health insurance.

#### 3. "Regimentation" of Workers.

The bills regiment every worker earning up to \$3,000 per year. Employing units which at any time during year have any individual in employment come under plan. See Section 155.

#### 4. Additional Taxation Levies on Payrolls.

In addition to the amounts already being deducted from the worker's pay check for Federal and State reserves, there will be deducted from ½ to 1½ per cent from their wages. The employer will have to contribute up to 2 per cent, which is added to his already heavy taxes. Beginning with July, 1941, the State must contribute as high as one per cent. This will add a large sum to our taxes. In 1941 the total payroll contributions for Federal Security plans, State unemployment reserves, and health insurance will reach 9 per cent.

#### 5. Physicians Are Also Regimented—Arbitrary Assignment in Cases.

Not only are all workers earning up to \$3,000 per year regimented, but physicians and surgeons, dentists, nurses, and hospitals will be regimented. Every worker must select a physician and surgeon to supervise his health at all times. If he fails to make such selection, one is arbitrarily assigned to him.

#### 6. Indefinite Number of Patients to Be Assigned.

There are no provisions for the amount of remuneration the physician is to receive, and Section 304 even gives the State the authority to fix the number of patients he may serve. An influential doctor might be assigned five thousand patients.

#### 7. The Diagnostic Center Scheme for Services of Specialists.

X-ray, laboratory services, and specialists and consultants' services will be rendered in public centers or let under contract at rates fixed by the State.

#### 8. *How Drug Stores Might Be Involved.*

Drugs and medicines may be purchased from any pharmacy which has agreed to sell them at prices fixed by the governing authority. It would be possible for a large chain to contract with the State at prices that would force the thousands of independent pharmacies out of business.

#### 9. *Tremendous Power of the "Governing Authority."*

The governing authority has full power to fix remuneration for nursing, hospitalization, dentistry, etc. See Section 306.

The worker is given no guarantee as to what length of service he is to receive and is at the mercy of the governing authority. See Section 235.

#### 10. *Tremendous Power of the "Medical Director."*

The scheme sets up a new State bureau known as the Bureau of Medical Service and places full administration of the health of all workers in the State earning up to \$3,000 per year, and all doctors serving them, in the hands of a medical director.

#### 11. *Insufficient Representation of the Medical Profession.*

Although medical men are presumed to be best fitted for advising on health administration and medical societies have been studying this problem for many years, they are *not* represented on the Advisory Council which assists the medical director. This Council is made up of three representatives of labor and two representatives of employers. When this Council acts in an advisory capacity to the Bureau of Medical Service, two physicians are added, but no physicians are on the Council when it assists the director in administering this vast scheme.

#### 12. *Other Objections.*

Careful reading of the bills will bring out many more points which are of serious concern to all citizens of the State.

These bills would set up another new bureaucracy, add additional tax burdens to workers, employers, and all citizens in general and embark California on an untried scheme of social insurance. It is impossible to estimate the hundreds of millions of dollars that such a scheme will collect from workers, employers, and general taxpayers.

These bills are unnecessary because the physicians of the State have already voluntarily established a plan to provide hospital and medical care on a proper actuarial basis at reasonable rates.

### SOME OBJECTIONS TO SENATE BILL 1128 AND ASSEMBLY BILL 2172

#### Informative Bulletin—B

##### 1. *Revenues.*

The revenues possible under the schedule of taxation and pay roll deduction will not cover 50 per cent of the benefits promised.

2. There is no social or economic justification of a schedule which assesses directly such a small sum from the beneficiary, i. e., 40 cents a month for a person making \$80 a month—\$2 for a person making \$200 a month, for the maintenance of the health of his family.

##### 3. *Panel System.*

The *panel system* has inherent defects which are repugnant to American medicine and to the American people, such as: the tendency for casual and hurried care, the disturbance of physician and patient relationship, the forced tying together of a contract basis of patient and doctor for a specified time, the tendency toward injudicious increased medication, etc.

##### 4. *Capitation Systems.*

The *capitation fee system* encourages poor work, unnecessary attentions, sloughing off of all cases possible onto

the clinic specialist or hospital, discourages preventive medicine, etc.

##### 5. *Proposed Types of Physicians.*

The division of the profession into general practitioner and clinic specialist will lower medical standards, tend to make two distinct castes. (Now most so-called general practitioners limit themselves voluntarily to certain types of practice, approaching the complete specialist in ability.) Under this system, they will be required to take care of all conditions which the powers to be may decide constitute general practice, thus leveling them down to mediocrity in all fields.

##### 6. *Morbidity and Mortality Rates in Foreign Countries.*

Morbidity and mortality rates are higher in compulsory health insurance countries.

##### 7. *Who Chooses Specialist or Hospital.*

Patient will not be allowed to choose his specialist or hospital.

##### 8. *"Governing Authority" Decides.*

(Section 235) There is no guarantee that the beneficiary will obtain the benefits promised him. The amount of service may be sharply curtailed by the governing authority.

##### 9. *How Large Can Panel Be?*

The size of a physician's practice is under the control of the governing authority. There is nothing in the act to prevent this authority from allowing political favorites to have extensive practices and to sharply limit those whom the authority desires to punish.

##### 10. *Public Competition to Private Laboratories.*

Laboratories (X-ray and pathological) and hospitals will be compelled to meet rates upon which publicly owned and tax-supported hospitals and laboratories can be operated.

##### 11. *Existing "Groups" May Be Favored.*

Provision is made to allow perpetuation of clinics and groups such as Ross-Loos, etc., or others that may be formed, and the rate of remuneration will be decided by the governing authority, giving an open road to political control.

##### 12. *Rights of Pharmacists May Be Endangered.*

The governing authority shall fix the price at which pharmacies may sell drugs. Chain stores will be the answer, or dispensing of drugs at the clinics.

##### 13. *"Advisory" Board to Medical Department Lacking in Sufficient Medical Personnel.*

The representation of the medical profession in the control of this act is completely inadequate. The governing authority is composed of laymen. The medical director will be politically appointed. His advisory council of seven will have only one representative of the physicians, and one of medical schools.

##### 14. *Hospitals Are Forgotten.*

The hospitals have no representation at all.

##### 15. *A New State Bureaucracy will Come Into Existence.*

The health of the State will be politically controlled, a new bureaucracy.

##### 16. *Defects in Plan not Easily Remedied.*

The code, if unworkable, can only be changed by the Legislature, which meets every two years, and even then organized opposition must be overcome.

##### 17. *Increased taxation will further retard recovery.*

##### 18. *Voluntary Plan of State Medical Association a More Desirable System.*

The code will seriously handicap the California Physicians' Service which offers definite guarantee of services promised, preserves the high standard of medical care, and the relationship of the physician and patient as far as possible under any insurance set-up.

**CALIFORNIA PHYSICIANS' SERVICE\*****Informative Bulletins****BULLETIN I**

Contract agreements with the three great nonprofit hospital associations of California were reported recently by California Physicians' Service, clearing the way for prompt presentation to the public of a voluntary, low-cost, monthly prepayment plan for medical, surgical and hospital care.

The three hospital associations are the Intercoast Hospitalization Insurance Association, with headquarters in Sacramento; the Insurance Association of Approved Hospitals group in and surrounding the San Francisco Bay area and the Associated Hospital Service of Southern California, with headquarters in Los Angeles.

Formal signing of the contracts agreed upon has now been set and the next step in the plan of the licensed doctors of medicine in California to enable employed and other groups to secure medical, surgical and hospital care by the doctors and hospitals of their own choice will be signing of contracts with the groups of patient, or beneficiary, members.

Signing of the hospital contracts will make available to the beneficiary members the services of approximately 80 per cent of the hospitals in California, excluding government-owned institutions and those which do not provide full hospital service. California Physicians' Service officials stated, however, that all other hospitals will be welcomed into the comprehensive medical, surgical and hospitalization plan, provided their standards of operation are approved.

With more than 4,700 licensed doctors of medicine in California now professional members of California Physicians' Service, Dr. Ray Lyman Wilbur, president, said the goal will be 100 per cent membership of licensed doctors of medicine and of approved hospitals in order to give the broadest selection to beneficiary members.

California hospitals, segregated by counties, that are affiliated with the three hospital associations are listed below:

**Los Angeles County.**—California Hospital, Cedars of Lebanon Hospital, Good Samaritan Hospital, Methodist Hospital, Presbyterian Hollywood Hospital, Santa Fe Hospital, White Memorial Hospital, Long Beach Community Hospital, Seaside Memorial Hospital, Huntington Memorial Hospital, St. Luke's Hospital, Glendale Physicians and Surgeons Hospital, Glendale Sanitarium and Hospital, Alhambra Hospital, Compton Las Campanas Hospital, Inglewood Centinela Hospital, San Pedro Hospital, Huntington Park Mission Hospital, Artesia Hospital, Covina Hospital, Monterey Park Garfield Hospital, Long Beach Harriman Jones Clinic Hospital, Golden State Hospital, Pomona Valley Community Hospital.

**San Bernardino County.**—Redlands Community Hospital, Loma Linda Sanitarium and Hospital, Upland San Antonio Community Hospital.

**Riverside County.**—Riverside Community Hospital.

**Orange County.**—Orange St. Joseph Hospital.

**Santa Barbara County.**—Santa Barbara Cottage Hospital, St. Francis Hospital.

**Ventura County.**—Ventura Foster Memorial Hospital, Oxnard St. John's Hospital.

**San Diego County.**—San Diego Mercy Hospital, Paradise Valley Sanitarium and Hospital, La Jolla Scripps Memorial Hospital, San Diego Elwyn Hospital.

**San Francisco County.**—Children's Hospital, Dante Hospital, Franklin Hospital, Greens' Eye Hospital, Mary's Help Hospital, Mount Zion Hospital, St. Joseph's Hospital, St. Francis Hospital, St. Luke's Hospital, St. Mary's Hospital, San Francisco Polyclinic Hospital, Stanford University Hospital, University of California Hospital.

**Alameda County.**—Alameda Sanatorium, Alta Bates Hospital, Berkeley General Hospital, Children's Hospital of the East Bay, East Oakland Hospital, Peralta Hospital, Providence Hospital, Samuel Merritt Hospital.

\* Address: 220 Montgomery Street, San Francisco. Telephone: EXbrook 3212.

**Marin County.**—Ross General Hospital, San Rafael Cottage Hospital.

**Contra Costa County.**—Antioch Hospital, Concord Hospital, Martinez Community Hospital, Richmond Cottage Hospital.

**Sonoma County.**—General Hospital of Santa Rosa, Healdsburg General Hospital, Petaluma General Hospital, Sebastopol Hillside Hospital, Sonoma Burndale Hospital, Eliza Tanner Hospital.

**Sutter County.**—Yuba City General Hospital.

**Butte County.**—Chico Enloe Hospital, Oroville-Curran Hospital, Chico Hospital.

**Yuba County.**—Marysville Rideout Memorial Hospital.

**Yolo County.**—Woodland Clinic.

**Placer County.**—Auburn Highland Hospital, Auburn Landis Hospital.

**Nevada County.**—Grass Valley W. C. Jones Memorial Hospital.

**Eldorado County.**—Placerville Sanitarium.

**Calaveras County.**—San Andreas Hospital.

**Tuolumne County.**—Sonora Hospital, Sierra Hospital.

**Stanislaus County.**—Newman Hospital, Oakdale Hospital, Robertson Hospital, St. Mary's Hospital, Turlock Lillian Collins Hospital, Emmanuel Hospital, Modesto McPheeters Hospital.

**Sacramento County.**—Mercy Hospital, Sutter Hospital.

**San Joaquin County.**—Stockton Dameron Hospital, St. Joseph's Home and Hospital, Lodi Mason Hospital, Lodi Buchanan Sanitarium.

**Tehama County.**—Red Bluff Mercy Hospital.

**Lake County.**—Upper Lake Hospital.

**Mendocino County.**—Ukiah General Hospital.

**Humboldt County.**—Arcata Trinity Hospital, Eureka St. Joseph's Hospital.

**Napa County.**—Vallejo General Hospital, Napa Victory Hospital, Calistoga General Hospital.

**San Mateo County.**—Mills Memorial Hospital.

**Santa Clara County.**—O'Connor Sanitarium, Palo Alto Hospital, San Jose Hospital, Wheeler Hospital.

**Santa Cruz County.**—Hanly Hospital, Santa Cruz Hospital, Watsonville Hospital.

**Monterey County.**—Community Hospital, Park Lane Hospital, Peninsula Community Hospital, Salinas Valley Hospital, The Monterey Hospital.

**San Benito County.**—Hazel Hawkins Memorial Hospital.

**Merced County.**—Merced Mercy Hospital, Los Banos Hospital, Los Banos Emergency Hospital, Dos Palos Community Hospital.

**Madera County.**—Madera Dearborn Hospital, Madera Sanitarium.

**Fresno County.**—Clovis Hospital, Fresno Burnett Sanitarium, Reedley Hospital, St. Agnes Hospital, Coalinga Hospital, Kingsburg Hospital, Coalinga Pleasant Valley Hospital, Sanger Sanitarium, Selma Sanitarium.

**Tulare County.**—Tulare Bellevue Hospital, Lindsey Hospital, Porterville Hospital, Tulare Hospital, Visalia Municipal Hospital.

**Kings County.**—Hanford Sacred Heart Hospital, Hanford Sanitarium.

**Kern County.**—Delano Hospital, Bakersfield Mercy Hospital, Bakersfield San Joaquin Hospital, Taft Community Hospital, Tehachapi Hospital.

\* \* \*

**BULLETIN II**

Voluntary group prepayment plans for low-cost medical service have achieved notable success in the United States within recent years along lines similar to that of California's plan embodied in the California Physicians' Service, Dr. Ray Lyman Wilbur said recently.

"Although California doctors of medicine are the first group to launch a voluntary plan for low-cost monthly prepayment medical, surgical and hospital care on a state-wide basis, they have as precedents the operation of voluntary programs elsewhere which indicate beyond question the voluntary system is practicable," said Doctor Wilbur, who is president of California Physicians' Service.

The King County, State of Washington, plan was referred to by Doctor Wilbur in support of his statement. A voluntary service for medical, surgical and hospital care

was started there six years ago and at present numbers more than 30,000 beneficiary, or patient, members.

"More than half the members of the King County plan are in the low-income group, in fact, earning between \$65 and \$75 a month," Doctor Wilbur said. "Yet these members have voluntarily joined the service and made their monthly payments in anticipation of illness or accident. Proof of their satisfaction is given by the steady growth of the service. The doctors, on the other hand, have found that application of the plan has greatly widened their field of service to the people."

Doctors in Missouri are now engaged in organization of a voluntary group medical care plan similar to that of California Physicians' Service and thus will be in all probability the second state-wide group in the United States to inaugurate this modern medical care plan, Doctor Wilbur said.

## COUNTY SOCIETIES

### HUMBOLDT COUNTY

The Humboldt County Medical Society met on April 14 at the St. Joseph Hospital in Eureka at 8:30 p. m. Dr. Samuel P. Burre, President of the Society, presided.

Dr. Jacob Smith of the University of California Medical School surgical staff gave a very interesting discussion on *Gastric Surgery*. His dissertation was illustrated by x-ray films, photographs, lantern slides, and blackboard sketches. Doctor Smith took up the various methods of diagnosis and explained the advantages of the gastroscope for some cases. The operation of choice was pointed out in each particular type of case.

Saturday morning, at the Humboldt County Hospital, Doctor Smith conducted an operative clinic in which he did a gastric resection. Doctor Smith is an able teacher as well as operator, and we consider ourselves fortunate in having an opportunity to learn from him.

Proposed changes in the constitution and by-laws of our medical society were read for the first time. A committee of three was appointed to formulate plans to combat subversive legislation. Dr. W. J. Quinn gave a report on his recent trip to Sacramento and discussed bills detrimental to the welfare of the medical profession.

J. S. WOOLFORD, *Secretary*.

✽

### KERN COUNTY

The Kern County Medical Society held a dinner meeting at the Taft Hotel, in Taft, on Saturday evening, April 22. Doctor Chester Mead presided at the meeting, which is held annually in Taft to enable the members of the Society to become better acquainted with the physicians practicing in the West Side. Nineteen members and guests were present.

Announcement was made by Dr. C. S. Compton regarding new plans for clinics at the farm workers' camps under consideration by the Agricultural Workers' Health and Medical Association. Dr. L. A. Packard reported on further developments of the California Physicians' Service. Sixty-two physicians in Kern County have applied for professional membership.

Dr. Lloyd Tarr introduced the speaker, Dr. C. M. Hyland, on the staff of the Children's Hospital, Los Angeles, in charge of the Serum Center. He spoke on the *Use of Immune Sera in the Treatment of Infections*. Doctor Hyland emphasized the value of convalescent serum as the best means of modifying and preventing measles and advised its use in children under three years of age and those who have had recent attacks of other diseases, such as pneumonia, whooping cough, childhood type of tuberculosis, etc., to reduce the mortality from the disease. Dosage is

5 cubic centimeters for a child under three, 10 to 15 cubic centimeters for older children and adults. In scarlet fever the use of immune serum has reduced the incidence of complications to 8 per cent in the Los Angeles General Hospital. Doctor Hyland stated that the contact rate is practically nil in children exposed to scarlet fever in the immunized group and 18 per cent in the nonimmunized group. The scarlet fever serum also has been used with good results in streptococcal pneumonia, postpartum septicemia and in various streptococcal septicemias. The speaker also advocated the use of convalescent serum in the treatment of poliomyelitis, in spite of recent reports casting doubts on its efficacy. In the treatment of surgical shock, prolonged vomiting, diarrhea, severe burns, and other conditions which lower the blood serum proteins, Doctor Hyland recommended using dried human blood serum, which may be administered in Ringer's solution or with glucose.

Following a long discussion of the subject, the meeting was adjourned.

C. S. COMPTON, *Secretary*.

✽

### MENDOCINO-LAKE COUNTY

The April 1 meeting of the Mendocino-Lake County Medical Society was called to order by President Robert B. Smalley.

The speaker for the evening, Dr. George M. Uhl, Chief of the Bureau of County Health Work, Department of County Health, spoke on the subject of *The County Health Officer*. The duties of the full-time health department were explained. The advantages of a highly integrated county health program were enumerated. The actual cost of the present health program, with part-time health officers, was presented. Doctor Uhl felt that for little additional cost the full-time health program could be inaugurated.

The subject was discussed by Dr. H. O. Cleland, the present county health officer. He urged that the present facilities be utilized, though changes to a full-time department might be contemplated for the future.

The Secretary reported on letters sent to our State Senator and Assemblymen relative to the Compulsory Health Insurance bill. The California Physicians' Service was then discussed, and the members of the Society were found to be coöperating fully in joining.

Application for membership by Dr. William J. Perry of Willits was received.

Application by Dr. H. O. Cleland of Ukiah for membership was accepted pending a formal request.

It was desired that the dinner meetings as held in the past with the wives be dispensed with to allow more time for routine business matters. The time of the next meeting was tentatively set for July, to be held in Willits.

DALLAS L. WAGNER, *Secretary*.

✽

### SACRAMENTO COUNTY

The regular meeting of the Sacramento Society for Medical Improvement was called to order by the president, Dr. Manuel Azevedo, in the Auditorium at Twenty-ninth and L streets, on February 2.

Dr. Frank Lee presented a case of a boy nineteen years of age with a congenital heart lesion. An interesting case discovered accidentally during an examination for entrance to a C. C. C. camp. The boy has been doing heavy work. Doctor Lee asked the speaker of the evening to discuss the case.

The paper of the evening was presented by Dr. A. Christie, Instructor in Pediatrics at the University of California. Doctor Christie presented a very interesting talk on *Heart Disease in Children*. Discussion was opened by Doctor Babcock and continued by Dr. F. Reardan.

The applications for new membership of Drs. W. Harding, A. M. Henderson, Jr., and J. Dillon were read for the

second time and voted upon. All were elected to membership. The applications of Drs. A. A. Atkinson, Lewis Specker, E. Blunden, and Pearson Kellogg were read for the first time.

Dr. F. Gundrum discussed the matter of postgraduate conferences in this area. The matter was referred to a committee, composed of Drs. M. Azevedo, D. Saeltzer, and G. Millar.

Doctor Dozier made a motion that the Board of Directors or the Secretary be instructed to invite Doctors Dukes and Kilgore to address the Society at a future meeting regarding the California Physicians' Service. Passed.

Doctor Cordes Ankele reported for the Banquet Committee.

G. E. MILLAR, *Secretary*.



#### SAN BERNARDINO COUNTY

The meeting of the San Bernardino County Medical Society was held at the Loma Linda Sanitarium in Loma Linda on Tuesday, March 7. Dinner was served at 7:30 p. m., with about eighty-five members and guests present.

The applications for membership of Dr. Elmer O. Carlson of Ontario and Dr. H. S. Eldredge of Lake Arrowhead were favorably voted upon.

Dr. W. W. Roblee, President of the California Medical Association, made a short address regarding *compulsory health insurance bills now before the State Legislature*, and urged physicians to join the California Physicians' Service to aid in defeating these highly undesirable bills.

Doctor Folkins introduced Dr. Margaret Sheerer of the University of California, who is making a survey of rheumatic fever in Redlands. Doctor Sheerer asked for the cooperation of the physicians.

The Chairman then introduced Doctor Butterfield, Superintendent of the Sanitarium, who introduced the speakers on the following program: *Clinical and Pathological Conferences in Cases of Jaundice*, by Dr. Newton Evans, Director of Laboratory of Los Angeles General Hospital, and Professor of Pathology of the College of Medical Evangelists; and *Value and Applications of Fever Therapy*, by Dr. Fred B. Moor, Professor of Pharmacology and Therapeutics, College of Medical Evangelists.

ARTHUR E. VARDEN, *Secretary*.



#### SAN JOAQUIN COUNTY

The regular meeting of the San Joaquin County Medical Society was held on April 6 in the Medico-Dental club-rooms in Stockton. The regular meeting was preceded by the customary supper meeting at the Hotel Wolf at which there were seventeen present. Doctor Barnes spoke on *Early San Joaquin County Physicians*. The regular meeting was called to order at 8:30 p. m. by President Neill P. Johnson.

Dr. Dewey Powell gave an outline of the *work done by the Legislative Committee*. He spoke on the importance of concentration effort to defeat the Administration Bill for Health Insurance and stated that he had been requested by the Nurses' Association to appear at Sacramento to speak in favor of the Nurses' Licensure Bill. Because of the stand taken by the California Medical Association against this bill, he made the following motion, which was seconded by Doctor Doughty: That the Secretary be instructed to write to the California Medical Association asking them to change their policy on the Nurses' Bill or to give sufficient reason to the local society for not changing this policy and reasons for Doctor Powell not appearing to speak in favor of the Nurses' Bill. The motion was carried.

Doctor Powell outlined the progress that has been made by the California Physicians' Service in signing up professional members. Up until last night there had been

sixty-six members signed up from San Joaquin County. This represents approximately two-thirds of the members in active practice.

The Membership Committee was called upon for a report and Doctor Rixford, Chairman, reported progress. The new By-Laws Committee was called upon for a report and Doctor Eccleston, Chairman, reported progress.

President Johnson announced that Doctor Teel would be in Stockton to speak on April 19. Doctor Teel is from the Harvard obstetrical staff, and his paper will be under the auspices of the Postgraduate Committee.

There being no further business to come before the Society the topic of the evening was then presented by Dr. Delbert Hand of Stanford. Doctor Hand presented a very interesting paper on the *Treatment of Non-Union in Fractures*. This was illustrated by drawings and x-ray films.

The meeting was adjourned at 9:30 p. m. and refreshments were served.

G. H. ROHRBACHER, *Secretary*.



#### SAN MATEO COUNTY

The meeting of the San Mateo County Medical Society was held in the banquet room of the Benjamin Franklin Hotel on March 22, with Dr. N. D. Morrison presiding.

The Chairman announced that Dr. William Roscoe Jepson had been elected to membership in the Society at the last meeting of the Board of Directors. The Chairman further announced that Dr. Alfred Goldman had been elected to associate membership in the Society.

The Secretary made an announcement concerning the present status of the bills for compulsory health insurance now before the State Legislature and mentioned the work of the Speakers' Bureau on this subject. Display boxes of the pamphlet, entitled "Family Doctor or Federal Agent," prepared by Medical Economics, were distributed to the members of the Society, who are requested to place this material in their waiting rooms.

The Chairman then introduced the first speaker of the evening, Dr. Charles Weiss of Mount Zion Hospital, who presented a paper and slides on the subject, *Current Views on Staphylococcus Infection and Immunity*. Doctor Weiss' paper represented a distinct contribution to the problem of control of staphylococcus infections, with especial reference to the use of staphylococcus antitoxin. The second speaker, Dr. John Cline, was introduced by the Chairman, and he presented a discussion on the subject, *The Clinical Application of the Staphylococcus Immunity Reaction*. Doctor Cline discussed the use of staphylococcus toxoid in superficial infections, and in the discussion period following he made mention of results of work with sulfapyridin, the new chemical agent which shows promise of becoming an important adjunct in the treatment of staphylococcal infections. The papers of Doctors Weiss and Cline were received with great enthusiasm by the Society.

J. GARWOOD BRIDGMAN, *Secretary*.



#### VENTURA COUNTY

The regular monthly meeting of the Ventura County Medical Society was held at the Saticoy Country Club on Tuesday, January 10.

President Mosher introduced Dr. Elmer Belt of Los Angeles, who gave a very interesting and instructive talk on *Gonorrhea and Its Complications*. Doctor Belt introduced Doctor Folkenberg of Los Angeles, who discussed the *Treatment of Gonorrhea by Sulfanilamide and Heat*; he also presented the latest methods for culturing the organisms.

The following communications were read: From Committee on Scientific Work regarding a booth devoted to plans and photographs of modern offices of physicians; from the State Medical Library, Los Angeles Division, in

regard to journals available; from the Los Angeles Society of Ophthalmology and Otolaryngology regarding a proposed legislative bill to license and regulate dispensing opticians.

Doctor Smolt made a motion that the Society endorse a bill to license and regulate dispensing opticians in the State of California, and that such a bill be presented at the present legislative session at Sacramento, and that the secretary of the California Medical Association be informed by letter. The motion was seconded by Doctor Coffey and was unanimously carried.

After a brief discussion Doctor Shore made a motion that the Society request the Council of the California Medical Association to set up a unit of the California Physicians' Service in this district as soon as expedient. The motion was seconded by Doctor Strong, and carried.

Doctor Shore made a motion that Dr. Louis Packard of Bakersfield be suggested to the Board of Directors of the California Physicians' Service. The motion was seconded by Doctor Smolt and was unanimously carried.

Dr. C. R. Bennett of Camarillo State Hospital was unanimously elected to membership.

The following committee was appointed:

Publicity: Doctors Coffey (chairman), Nelson, Harker, Drace, and Morrison.

At the next monthly meeting Judge Henderson will speak on *Medical-Legal Problems*.

♦ ♦ ♦

A special meeting of the Ventura County Medical Society was held at the Saticoy Country Club on Monday, January 23.

President-Elect C. A. Dukes, Secretary George H. Kress of the California Medical Association, and L. A. Packard, Councilor of the Third District, addressed the Society on *California Physicians' Service and other problems of the California Medical Association*.

There was no business meeting.

♦ ♦ ♦

The regular monthly meeting of the Ventura County Medical Society was held at the Saticoy Country Club on Tuesday, March 14.

Doctor Boyes gave a very fine illustrated talk on *Infections of the Hands and Their Treatment*.

Mr. Hadenger of Lloyd's spoke on *The History of Malpractice Insurance*. Mr. Reed gave some of the *Legal Aspects and Causes of Suits*.

A report of the Secretaries' Conference was given by the Secretary.

The addition of another physician to work under Doctor Wylie in the Health Department and help with the examination of school children in the outlying districts was discussed. As the hour was late and discussion did not seem to be accomplishing anything, Dr. W. S. Clark made a motion that the matter be tabled. The motion was seconded by Doctor Nielsen, and carried.

Doctor Homer made a motion that a vote of thanks be given Doctor Boyes for a splendid talk. The motion was seconded by Dr. W. S. Clark, and was unanimously carried.

A. A. MORRISON, Secretary.

## CHANGES IN MEMBERSHIP

### New Members (67)

#### Alameda County

J. A. Crane	Ann L. Martin
Edward G. Ewer	Eli R. Movitt
Richard P. Johnson	Ernst Windesheim

#### Butte County

Arthur E. Allen

#### Fresno County

V. E. Jeans	Maurice F. Stock
Fred Q. Jing	John Weber

R. A. Schaumloffel

#### Kern County

W. H. DeSmet	J. T. Stanton
W. H. McDonald	

#### Los Angeles County

Otto Arndal	John T. Klausner
Louis Baltimore	Lillian Kositz
J. Harold Cantarow	William L. C. MacBeth
Harry L. Dixon	Frederick D. Newbarr
O. S. Hansen	Werner Rammelt
H. P. House	

#### Marin County

Andrew E. Thuesen, Jr.

#### Mendocino-Lake County

William James Perry	E. H. Sawyer
---------------------	--------------

#### Monterey County

H. M. Stufflebam	Vera Wayman
Frederick A. Veitch	J. J. Weir

#### Sacramento County

A. M. Henderson, Jr.

#### San Bernardino County

Robert N. Williams

#### San Diego County

Albert Ickstadt, Jr.	George W. Morris
A. E. Moore	Harrison S. Paynter

#### San Francisco County

Coleman A. Block	John B. DeC M. Saunders
Leonid S. Cherney	(Associate)
Margaret H. Reese	William F. Wagner

#### San Luis Obispo County

Horace Hagen	Albert Shershow
Newell Nay	

#### San Mateo County

William R. Jepson

#### Santa Barbara County

John W. Needles

#### Santa Cruz County

J. B. Cutter	J. C. Jacobson
--------------	----------------

#### Siskiyou County

Harry R. McVicker	Alex J. Otten
-------------------	---------------

#### Solano County

Howard E. Gardner	H. Randall Madeley
Herman Henry	

#### Sonoma County

Burton L. Zinnamon

#### Stanislaus County

Terry Laird	Frank F. Schade
B. R. Pearson	

#### Tulare County

D. B. Cherry	Donald G. MacKinnon
--------------	---------------------

#### Yolo-Colusa-Glenn County

Austin M. Clark	John O. Raffety
Charles Kelley Mills	John W. Rovane

#### Yuba-Sutter County

T. E. Larner

**Transferred (12)**

Gordon Bunny, from Santa Cruz County to Solano County.

George A. Foster, from Sacramento County to Placer County.

Harold F. Galbraith, from Los Angeles County to Ventura County.

Clarence T. Halburg, Jr., from Los Angeles County to San Bernardino County.

W. F. Harding, from Marin County to Sacramento County.

Robert A. Hare, from Santa Barbara County to Maryland State Association.

John E. Kirkpatrick, from Los Angeles County to Shasta County.

Edward S. Lodge, from Los Angeles County to Orange County.

Henry G. Mello, from Butte County to Alameda County.

Francis B. Sheldon, from Orange County to Los Angeles County.

B. W. Wright, from Los Angeles County to Tennessee State Association.

Dwight Dunham Young, from Los Angeles County to Orange County.

## In Memoriam

**Bollig, Harold Lewis.** Died at Los Angeles, March 21, 1939, age 36. Graduate of the University of Nebraska College of Medicine, Omaha, 1929, and licensed in California the same year. Doctor Bollig was a member of the Los Angeles County Medical Association, the California Medical Association, and a Fellow of the American Medical Association.

✱

**Hart, Horton Edwin.** Died at San Francisco, March 23, 1938, age 57. Graduate of the University of California Medical School, San Francisco, 1904, and licensed in California the same year. Doctor Hart was a member of the San Mateo County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.

✱

**Lowell, George Clough.** Died at San Anselmo, March 27, 1939, age 46. Graduate of the University of California Medical School, San Francisco, 1936, and licensed in California the same year. Doctor Lowell was a member of the Marin County Medical Society, the California Medical Association, and the American Medical Association.

✱

**Ormsby, Elon A.** Died at Centerville, March 24, 1939, age 67. Graduate of the California Eclectic Medical College, Los Angeles, 1896, and licensed in California the same year. Doctor Ormsby was a member of the Alameda County Medical Association, the California Medical Association, and a Fellow of the American Medical Association.

✱

**Scanland, John Milton.** Died at Napa, March 14, 1939, age 65. Graduate of the College of Physicians and Surgeons, Baltimore, Maryland, 1897. Licensed in California in 1925. Doctor Scanland was a member of the Napa County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.

## THE WOMAN'S AUXILIARY TO THE CALIFORNIA MEDICAL ASSOCIATION†

MRS. CLIFFORD A. WRIGHT.....President  
MRS. FRED H. ZUMWALT.....Chairman on Publicity  
MRS. FRANK H. RODIN.....Assistant Chairman on Publicity

### News Letter

Dear Auxiliary Members:

As the fiscal year draws to a close, we wish to congratulate and thank the officers, chairman and members of each County Auxiliary who have served loyally and have given their best efforts in carrying on the program of education, service and friendship.

May I, as assistant publicity chairman, join Mrs. Fred H. Zumwalt in thanking each and every one who has so efficiently helped during the year by sending in the material used for publicity. Your coöperation has been very valuable and helpful. It has been a privilege and a pleasure to serve you.

To the newly elected officers and chairmen our best wishes for success. The value of the auxiliaries to the county medical societies is being recognized and appreciated through the faithful service, coöperation and understanding given by the members of the auxiliaries.

Reports and convention activities will be published in the following issues of the CALIFORNIA AND WESTERN MEDICINE.

Sincerely yours,

MRS. FRANK H. RODIN.

### Component County Auxiliaries

#### *Alameda County*

Unusually successful was the Annual Student Loan Fund party given in March by the members of the Woman's Auxiliary to the Alameda County Medical Association.

Over five hundred women met for luncheon at the Claremont Country Club, and to admire the beautiful gowns and costumes modeled by the following charming members: Mesdames Thomas Clark, A. S. Alexander, Dudley Smith, Grant Ellis, Gordon Roberts, C. B. Fowler, Chelsea Eaton, Maxwell Thebaut, James Barr, George Nesche, and J. B. Hollingsworth.

Mrs. William Sargent presided at the microphone and introduced each model as she appeared and walked down the aisle to the soft music of the orchestra.

After the fashion show, bridge was enjoyed by the members and guests. Rose bushes were presented as prizes to the winners at each table.

In keeping with the season, spring flowers in all their glory were in evidence everywhere.

Appreciation and thanks is extended to the very capable chairman of arrangements, Mrs. Wallace Patch. And to Mrs. George Mainwaring, chairman of the fashion show; Mrs. Forest Kracaw, luncheon chairman; Mrs. Grant Ellis, publicity chairman; Mrs. Richard Young, chairman of reservations and Mrs. Suren Babington, bridge chairman.

MRS. GRANT ELLIS, *Publicity Chairman.*

† As county auxiliaries of the Woman's Auxiliary to the California Medical Association are formed, the names of their officers should be forwarded to Mrs. Frank H. Rodin, Assistant Chairman of the Publicity and Publications Committee, 2457 Bay Street, San Francisco. Brief reports of county auxiliary meetings will be welcomed by Mrs. Rodin and must be sent to her before publication takes place in this column. For lists of state and county officers, see advertising page 6. The Council of the California Medical Association has instructed the Editor to allocate two pages in every issue to Woman's Auxiliary notes.

*Fresno County*

The addition of thirteen new members to the Woman's Auxiliary to the Fresno County Medical Society was reported by Mrs. W. F. Stein, vice-president and membership chairman. This is outstanding evidence that the doctor's wives are realizing the value of the Woman's Auxiliary.

Thirty members were present at the meeting held April 4, at the University Sequoia Club. Mrs. Otto Dederich, a member of the Auxiliary, reviewed the book *Consultation Room*, by Dr. Frederick Loomis.

MRS. CHARLES H. INGRAM, *Publicity Chairman*.

*Los Angeles County*

The members of the Woman's Auxiliary to the Los Angeles County Medical Association met for luncheon, March 28, at the County Medical Building. The president, Mrs. William H. Leake, presided with 105 members and guests present.

After the business meeting, Dr. George D. Maner, a member of the Committee for Pneumonia Control of the California Medical Association, gave an interesting talk on the *Diagnosis and Treatment of Pneumonia*.

Drs. John Fleude and Clarence Toland spoke in behalf of the drive for the *Control of Cancer*, illustrated by a film entitled *Fight Cancer With Knowledge*.

MRS. KARL VON HAGEN, *Publicity Chairman*.

*Marin County*

The March meeting of the Woman's Auxiliary to the Marin County Medical Society was held at the Sleepy Hollow Golf Club.

Twenty-four members met for dinner. After the business meeting Mrs. C. A. De Lancey read a play entitled *Charity Begins at Home*. The play was approved and members of the Auxiliary are rehearsing the parts and the play will be presented at the May meeting for the entertainment of their husbands and friends.

MRS. C. A. DE LANCEY, *Publicity Chairman*.

*Monterey County*

The Woman's Auxiliary to the Monterey County Medical Association is again happy to have been the hostesses to the members and guests of the woman's auxiliaries who attended the convention of the California Medical Association in Del Monte.

A very active year is reported as follows:

In January a card party at the House of Four Winds in Monterey, the proceeds were used to supply furnishings for the children's tuberculosis unit of the Monterey County Hospital.

In February the members met for luncheon at the Santa Lucia Inn at Salinas.

In April, the retiring president, Mrs. Garth Parker, was the hostess to the members of the Auxiliary at a luncheon at her home.

The newly elected officers are: president, Mrs. A. A. Arehart; vice-president, Mrs. Herbert Archibald; secretary, Miss Elizabeth Merrill, and treasurer, Mrs. G. Eberhardt.

MRS. A. A. AREHART, *Publicity Chairman*.

*Orange County*

The Woman's Auxiliary to the Orange County Medical Society honored three state officers at their March meeting, held at the home of Mrs. G. Wendell Olson. The visiting

guests were Mrs. Clifford A. Wright, president; Mrs. E. Eric Larson, secretary, and Mrs. Arthur T. Newcomb, councilor and librarian of the California Woman's Auxiliary.

After the business meeting the program chairman, Mrs. K. H. Sutherland, introduced the guests who spoke on the various activities of the Woman's Auxiliary.

Mr. E. E. Smith of Anaheim spoke on the *Life of Johannes Brahms*, German music composer, and Mrs. Dana Newkirk played several of Brahms compositions.

Mrs. Olson was assisted during the tea hour by Mesdames Harold Gobar, Dale Petteplace, Edwin Kersten and C. F. W. Kohkenberger.

MRS. G. WENDEL OLSON, *Publicity Chairman*.

*Riverside County*

Mrs. James F. Percy, revisions chairman of the National Auxiliary and parliamentarian of the State Auxiliary, was the guest speaker at the February meeting of the Riverside County Auxiliary. Mrs. Percy discussed the *Aims and Problems of the Auxiliary*, and traced the development of Socialized Medicine in the United States and the part that the doctor's wives should play in the present situation.

The president, Mrs. W. W. Roblee, presided at the meeting, which was held at the home of Mrs. Erwin Miller.

After the meeting the doctors joined their wives for refreshments and entertainment. Mrs. Charles Miller played several of her own compositions on the piano.

Assisting the hostess, Mrs. Erwin Miller, were Mesdames W. K. Templeton and O. M. Wheeler.



In March the president, Mrs. W. W. Roblee, assisted by Mrs. George W. Coon, was hostess to the members of the Woman's Auxiliary to the Riverside County Medical Society at a very delightful luncheon at her home. About twenty members and guests were present.

After a short business meeting, Mrs. F. G. Lindemuller, chairman of public relations of the San Diego County Auxiliary, gave a most interesting talk on *Practical Problems of the Auxiliary*.

MRS. T. A. CARD, *Publicity Chairman*.

*San Diego County*

The Woman's Auxiliary to the San Diego County Medical Society welcomed back their president, Mrs. C. O. Tanner, on her return from a trip to Europe.

Mrs. Tanner presided at the meeting in March, which was held at the University Club.

Very gratifying was the report on the annual bridge benefit. The final arrangements for the annual spring dinner dance were made.

MRS. H. K. ALBERTSON, *Publicity Chairman*.

*San Francisco County*

The members of the Woman's Auxiliary again invited their husbands and members of the San Francisco County Medical Society to a Valentine dinner dance, held in the beautiful home of the Medical Society.

Mrs. William W. Newman was in charge of arrangements, assisted by the following committee: Mesdames Thomas E. Gibson, John Humber, Maurice Korshet, Bernard Cody, Charles Noble, Andrew Stockton, Robert Newell, Edmund Morrissey, Wilbur Swett, Frank Hand, George Becker, Maurice Eliaser, John Sampson and Fred D. Fellows.

Dr. Lawrence R. Custer was Master of Ceremonies. His accordion and entertaining manner were greatly enjoyed.

Mrs. Thomas E. Gibson, president of the Auxiliary, very graciously sang many selections accompanied on the piano by Dr. Clifford A. Dickey. The dialect stories of Drs. Ellsworth F. Quinlan, Donald deCarle, and Dudley Smith were very amusing and entertaining.

The lovely decorations of spring blossoms and flowers and the Valentine motives of red and white added much to the party spirit.

To complete the evening's entertainment, the guests enjoyed the art exhibit, shown in the ballroom, of paintings, sculpture, wood carvings, prints, and photography, etc., which were executed by doctors.

MRS. CLAIN F. GELSTON, *Publicity Chairman*.



#### San Joaquin County

The State President, Mrs. Clifford A. Wright, and her secretary, Mrs. E. Eric Larson, were the honored guests at a luncheon preceding the regular meeting of the San Joaquin County Auxiliary in February.

The meeting was held at the home of Mrs. Vern Ross. Mrs. Wright gave an interesting talk on *How the Doctors' Wives Can Be of Service in Their Community*.

Tea was served after the meeting and the nineteen members present enjoyed meeting the guests and a social hour.

MRS. G. K. WEVER, *Publicity Chairman*.



#### Santa Barbara County

Eleven health chairmen, representing various organizations, were the guests of the Woman's Auxiliary to the Santa Barbara County Medical Society at the March meeting, held at the home of Mrs. Frank J. Hombach.

Dr. Susanne Parsons gave an interesting and enlightening talk on the *Work of the American Society for the Prevention of Cancer*.

The following officers were elected for the ensuing year: Mesdames Edward L. Markthaler, president; Richard McGovney, first vice-president; O. C. Jones, second vice-president; C. W. Henderson, recording secretary; P. A. Gray, corresponding secretary, and John Van Paing, treasurer.

Mrs. Alfred Wilcox, chairman of the Committee in Charge of Arrangements for the bridge tea, reported on the plans.

After the meeting, tea was enjoyed by the members and guests.

The members of the Auxiliary sponsored a musicale on Easter Sunday afternoon, the proceeds of which were contributed to the Cancer Control Campaign. Mr. Henry Eicheim, noted musician, arranged the program.

MRS. C. W. HENDERSON, *Publicity Chairman*.



#### Santa Cruz County

*Cure and Prevention of Tuberculosis* was the subject presented by Dr. J. D. Fuller and Miss Lois Holworth, County Health Nurse, at the March meeting of the Woman's Auxiliary to the Santa Cruz County Medical Society.

Eleven members and two guests met for luncheon at the Appleton Hotel in Watsonville.

MRS. R. C. ALSBERG, *Recording Secretary*.



#### Tulare County

The Woman's Auxiliary to the Tulare County Medical Association held its March meeting in Visalia.

Mr. Combs, an attorney, gave a fascinating talk on *Books, the Print and Bindings*, and illustrated same with an interesting display.

MRS. W. B. PARKINSON, *Corresponding Secretary*.

*First Pan-American Coöperation Was in Public Health Work.*—"The interest, enthusiasm, and occasional criticism aroused by the eighth International Conference of American States at Lima, Peru, recently," says an editorial in *The Journal of the American Medical Association* for April 1, "offer opportunity to point out that when effective Pan-American coöperation in most matters was still a dream of statesmen and scholars it had already been achieved in the field of public health, largely under medical auspices.

"International coöperation of the American republics in this field began at the quarantine conference held in Washington in 1881."

Among the notable accomplishments of the Pan-American Sanitary Conferences, the first of which was held in 1902, was the approval of a Pan-American Sanitary Code in 1924, a model international health charter which was the first Pan-American treaty unanimously ratified by all the republics.

The tenth Conference, held in Bogotá, Colombia, in September, 1938, was one of the most successful because of the completeness of its program, the size and technical character of its delegations, and the extensive scientific reports submitted.

"The eleventh Pan-American Sanitary Conference is scheduled to be held in Rio de Janeiro, Brazil, in about four years and will be preceded by the fourth Pan-American Conference of National Directors of Health, to be held in Washington in 1940," the editorial reports.

"The American Medical Association lent effective and practical support to this movement through the publication of its Spanish edition for a period of ten years (1918-1928)."

*Parents Should Pay More Attention to Children's Good Behavior.*—If parents would pay more attention to their children's good behavior and ignore their bad conduct, temper tantrums would become much less frequent, William I. Fishbein, M. D., Chicago, suggests in the May issue of *Hygeia*, the health magazine.

When the child has a tantrum, Doctor Fishbein advises, "put him into a room where anything which he may destroy is out of reach, and leave him alone until the tantrum is over.

"Make sure that the child does not attain by the tantrum the object for which he is having it. Control your own temper. Do not scold the child nor punish him for the tantrum.

"Try to keep the legitimate reasons for the child's anger at a minimum. Interfere as little as possible with the child's natural activities. Correct improper behavior promptly with as little fuss as possible. Do not permit today what will be forbidden to morrow."

Any physical source of irritation should be discovered and remedied, Doctor Fishbein points out. However, many parents become unduly alarmed when an angry child holds his breath and becomes momentarily unconscious. "A child has never injured himself during such an attack, and if he is left alone, the breathing begins normally in a few seconds," the author says.

An epileptic attack may resemble breath holding, but a physician can easily tell the difference. Once the parent has been assured that the child does not have epilepsy, he should ignore the breath holding.

We are beginning to recognize that amusement . . . is a commodity as essential to the physical and mental health and well-being of the human animal as lumber, wheat, oil, steel, or textiles.—Milton Sills.

## MISCELLANY

Under this department are ordinarily grouped: News Items; Letters; Special Articles; Twenty-five Years Ago column; California Board of Medical Examiners; and other columns as occasion may warrant. Items for the News column must be furnished by the fifteenth of the preceding month. For Book Reviews, see index on the front cover, under Miscellany.

## NEWS

### Coming Meetings

*American Medical Association*, St. Louis, Missouri, May 15 to 19, 1939. Olin West, M. D., Secretary, 535 North Dearborn Street, Chicago, Illinois.

*California Medical Association*, Hotel Del Monte, May 1 to 4, 1939. George H. Kress, M. D., Secretary, 450 Sutter Street, San Francisco.

*Nevada Medical Association*, Reno, September 22 and 23, 1939. Horace J. Brown, M. D., Secretary, P. O. Box 689, Reno, Nevada.

### Medical Broadcasts\*

#### *Los Angeles County Medical Association*

The radio broadcast program for the Los Angeles County Medical Association for the month of May is as follows:

Thursday, May 4—KECA, 10:45 a. m., The Road of Health.  
Saturday, May 6—KFI, 9:00 a. m., The Road of Health;  
KFAC, 11:30 a. m., Your Doctor and You.

Thursday, May 11—KECA, 10:45 a. m., The Road of Health.  
Saturday, May 13—KFI, 9:00 a. m., The Road of Health;  
KFAC, 11:30 a. m., Your Doctor and You.

Thursday, May 18—KECA, 10:45 a. m., The Road of Health.  
Saturday, May 20—KFI, 9:00 a. m., The Road of Health;  
KFAC, 11:30 a. m., Your Doctor and You.

Thursday, May 25—KECA, 10:45 a. m., The Road of Health.  
Saturday, May 27—KFI, 9:00 a. m., The Road of Health;  
KFAC, 11:30 a. m., Your Doctor and You.

**The American Congress on Obstetrics and Gynecology.**—The first American Congress on Obstetrics and Gynecology is to be held in Cleveland, Ohio, from September 11-15, 1939. This important meeting comes at a crucial time in American Medicine. The problems associated with human reproduction have become of paramount importance, arousing the intense interest of the public and the profession. The meeting will provide the first opportunity for all the interested groups of workers to assemble together. Doctors, nurses, hospital administrators and public health workers will meet and discuss their mutual problems and correlate their many ideas. A large and representative attendance is necessary to assure the success of this meeting. Already more than 1,400 advance registrations have been received.

We are anxious to have your JOURNAL participate in the medical publicity so that the physicians of your state can be apprised of the coming meeting. We have already had the support of many local and national medical publications. We would appreciate your official editorial comment concerning the meetings. If you could carry a notice of the meeting on the cover of your JOURNAL or in a prominent place in your future numbers, it would help considerably in creating interest among your physicians. Dr. T. Henshaw Kelly, your State Chairman and his committee will be delighted to cooperate with you in every way. For information, address M. Edward Davis, M. D., Publicity Committee, The Annex, 650 Rush Street, Chicago, Illinois.

\* County societies giving medical broadcasts are requested to send information as soon as arranged (stating station, day, date and hour, and subject) to CALIFORNIA AND WESTERN MEDICINE, 450 Sutter Street, San Francisco, for inclusion in this column.

**The American Dietetic Association.**—The twenty-second annual meeting of the American Dietetic Association will be held at the Hotel Ambassador in Los Angeles, August 27 through the 31st, 1939.

Miss Mary Northrop, King's County Hospital, Seattle, Program Chairman, has already received acceptances from several well-known West Coast speakers.

Agnes Faye Morgan, Ph.D., of the University of California, will speak on "The Dietitian's Place in the Hospital Research Program"; Albert H. Rowe, M. D., Oakland, will speak on "Allergy"; E. Neige Todhunter, Ph.D., State College of Washington, will talk on "The Newer Knowledge of Vitamin C in Health and Diseases." For further information, address the American Dietetic Association, 185 North Wabash Avenue, Chicago, Illinois.

**American Academy of Ophthalmology and Otolaryngology.**—The forty-fourth annual convention of the American Academy of Ophthalmology and Otolaryngology will be held in Chicago, October 8-13 at the Palmer House, a bulletin announces.

The academy has a membership of about 2,800 eye, ear, nose and throat specialists and the attendance at meetings is usually well over 2,000. It is said to be the largest organization of specialists in the United States.

About half the program is devoted to formal addresses, but fully half the week's activities consist of "instructional courses," in which the doctors go to school in earnest, with hundreds of eminent specialists as their instructors.

Dr. George M. Coates, Philadelphia, is president this year and Dr. Albert C. Snell, Rochester, New York, is president-elect. For information, address 1500 Medical Arts Building, Omaha, Nebraska.

**1938 Said to Be Record Health Year.**—The year 1938 is expected to establish an all-time record for low death rates from all causes in the United States, and particularly for tuberculosis, typhoid, diphtheria and infant mortality. This is set forth in a statement issued by the University of California Curricula in Public Health, prepared by Dr. Haven Emerson of the De Lamar Institute of Public Health of Columbia University.

"We are now in fact the possessors of better general health, are less afflicted with diseases known to be preventable, are more secure in the survival and growth of our offspring to maturity and have an average expectancy of life greater than that of any population group in the history of man," the statement said.

The statement suggests that the United States should further put its health house in order "by following the example of Canada and England and a score of other nations in consolidating all of their health services under one department, with a secretary for health in the national cabinet."

State and local health departments "are weary and bewildered by the duplicating and often conflicting proposals of unrelated bureaus and boards of Federal Government, each with ideas, standards and money grants with strings attached for health improvement," the statement said.

"That some people who need medical attention do not receive it will always be true, but the reasons for this are not all due to the inability of these sick to pay for the cost of necessary treatment. It may result from ignorance, superstitions and misinformation," the statement said.

**American Association of Industrial Physicians and Surgeons.**—The twenty-fourth annual meeting of the American Association of Industrial Physicians and Surgeons with the American Conference on Occupational Diseases and Industrial Hygiene will be held at the Hotel Statler, Cleveland, Ohio, June 5, 6, 7, and 8, 1939. A program of timely interest and importance will be presented by speakers of outstanding experience in all of the medical and engineering problems involved in industrial health. A cordial invitation is extended to all whose interests bring them in contact with these problems. Information regarding hotel accommodations, etc., may be obtained from A. G. Park, Convention Manager, 540 North Michigan Avenue, Chicago.

**Shock Therapy of Benefit But Needs Research.**—The development of "shock" therapy for mental disorders is not at present the unbounded success that it has been called in some quarters, although it holds considerable promise and merits the continuation of active research. This is stated by Dr. Nolan D. C. Lewis, director of the New York Psychiatric Hospital, who visited here to advise with the University of California administration in the possible reorganization of the psychiatric services of the University's medical school here.

The use of insulin and the drug metrazol, an ally of camphor, as a therapeutic "shock" source in certain mental diseases has been found of benefit, Doctor Lewis said. However, it is necessary to confine the treatment to certain types of diseases and certain selected patients within these types, and extreme skill is necessary in both the selection of the patients and the administration of either drug, if untoward effects are to be avoided. When such care has been exercised the treatment may effect cures in 60 per cent of the cases treated.

The increase in mental patients has been rapid in the past few years for no exactly apparent reason, Doctor Lewis said. This increase has laid considerable new stress on the psychiatric and neurologic approach to disease in hospitals and has occasioned many new problems for the medical profession.

"We cannot lay this increase to economic unrest and the stresses and strains of life solely," Doctor Lewis said. "The average individual is being bombarded with new experiences and impressions which force him to live a lifetime in a few years. These developments are coming along apparently faster than the delicately balanced and highly organized human nervous system can handle them. It cannot properly integrate them in many instances apparently, and a breakdown follows.

"If the damage has not been too great, rest and a reversal of the former mode of life may be beneficial. Shock therapy is being tried in the more advanced cases with the results noted."

**Endocrine Glands Subject of Special Course.**—The human endocrine glands, sometimes called "the glands of personality," little masses of cells, controlling the emotions, love and sex, but which may also cause gigantism, dwarfism and other abnormalities, were made the subject of a recent short course for practicing physicians at the University of California Medical Center. The course was decided on in order to give the profession at large new information concerning these glands which has been developed in laboratories and research institutions in the last several months.

The glands are scattered throughout the body. From the blood these little masses of tissue abstract chemicals and transform them into secretions known as hormones. These hormones are poured back into the blood and the glands which produce them are therefore sometimes called glands

of internal secretion. The thyroid gland largely governs the rate and completeness with which the oxygen we breathe unites with and burns up foodstuffs. The parathyroids and the adrenals govern, in part at least, the absorption and use of minerals in bones and other tissues. The gonads give the powers and evidences of femininity and masculinity. Parts of the pancreas guide the storage and burning up of sugar in the body. The pituitary, the most complicated of all glands, has been called the "master gland," for its hormones seem to be needed by the other glands if they are to function in a healthy manner. The pituitary has a powerful influence over growth.

The remarkable progress that has been made in the study of endocrine gland function, and the treatment of gland disturbances in the past few years were thoroughly reviewed in the course. The necessity of having a trained physician prescribe glandular extracts was stressed.—University of California Clip Sheet.

**Press Clippings.**—Some news items from the daily press on matters related to medical practice, follow:

#### Olson Backs Health Plan

Governor Olson last night devoted his regular Sunday night broadcast to a plea for the proposed compulsory state health insurance law—a measure which would burden California pay rolls with additional levies on both employer and employee.

The Governor pointed out the service would apply to all workers earning up to \$3,000 annually and would be financed by a 1 per cent contribution from each worker's salary, plus contributions up to 2 per cent from employers.

He characterized the plan as "a central policy of my administration" and interpreted it as an economy measure in as much as it "will reduce the cost of relief by reducing sickness that finally makes wage earners destitute."—San Francisco Examiner, April 10.

#### Health Insurance

In his talk broadcast Sunday, Governor Olson said his health program to be financed by a pay roll tax should be adopted because there is need of better health protection. There are many pressing needs, among them modern prisons to take the place of prisons making first offenders habitual criminals, provide hospital facilities for the insane, adequate aid to the blind and crippled to enable them to be self supporting. Yet they must be postponed because no government can satisfy all social needs.

The New Deal tried to do it, with the result tax burdens have become so heavy they exceed the capacity of industry to carry them. Measures designed to aid the ill-nourished, ill-clad and ill-housed, have made their condition worse because they reduced employment in private industry.

The most important welfare interest in California is restoring employment. Taxes are already so high many employers are compelled to reduce their employees to keep out of the red. Another pay roll tax for health would swell the ranks of the unemployed.

The people now have a health service equal to the best in the world. A voluntary group insurance program is being worked out to improve it. Assuming Governor Olson's health program to be desirable, it should be postponed until a sound recovery is achieved.—San Jose Mercury-Herald, April 11.

#### Health Laws Urged

##### Olson Upholds Insurance Bills

Examiner Bureau, Sacramento, April 13.—Governor Culbert L. Olson today sent to the Legislature a strong recommendation for passage of two compulsory health insurance bills, drafted by Labor's Non-Partisan League and incorporated in the administration's legislative program.

Arguing for the measure, which would be financed through new pay roll taxes, deductions from wage earners' checks and a general fund contribution from the state, Olson said:

"A fundamental change is needed in the method of meeting the costs of medical care and the risks and loss of sickness, especially for wage earners and others of small or moderate income."

Medical organizations have expressed opposition to Olson's proposal as opening the way for "state medicine," while considerable protest has been heard from small business men, complaining against added pay roll taxes. De-

partment of Employment estimates have set the probable annual taxation cost of such a program at \$81,000,000.—*San Francisco Examiner*, April 14.

\* \* \*

#### Impossible Plan

##### *Medicine, Politics Don't Mix*

The compulsory health insurance plan now before the state Legislature is bad legislation.

The bill is badly drawn, vague and full of ambiguities. It mixes politics and medicine in a dose that would soon nauseate the recipients—all persons earning \$3,000 a year or less.

It imposes thumping new pay roll taxes both on the worker and the employer. It adds these taxes to the pay roll taxes already imposed on worker and employer for social security and unemployment. In some cases the total pay roll taxes would reach 9 per cent, an impossible burden on labor and business, a sure way to multiply unemployment, thereby necessitating more and more taxes, world without end.

The bill creates a politically appointed "governing authority" and a political "medical director." It sets up an advisory board of three union labor representatives, two business representatives, one representative of California medical schools and one doctor. The advisory board is hokum, being without any real powers.

The politicians would run the show. They would run out all but political doctors. There would be no incentive to careful medical practice, but every incentive to political practice. The doctors with the most political pull would get the most business.

Finally, there is an alternative which deserves at least a trial. The doctors themselves are about to offer a low-cost medical and hospital service, under a voluntary insurance plan, to the same group affected by the compulsory insurance bill.

Let us give the doctors a chance to demonstrate their plan before we burden industry—employer and employee alike—with a new load of taxes and tax-eaters.—*Editorial, Los Angeles Examiner*, April 8.

\* \* \*

#### Compulsory Health Plan Can Wait

As well intentioned as it may be, this is no time to adopt a compulsory health insurance program for California, as strongly advocated by Governor Olson.

In the first place, the administration-backed measure, indorsed by the C. I. O. Labor's Nonpartisan League, calls for financing by a pay roll tax paid by employers and employees, plus state contributions.

There can be little enthusiasm among the workers for another deduction from their pay checks. At this particular time there are too many misgivings over the status of funds collected through an existing assessment. We refer to the recent intimation that money to pay state unemployment benefits will be exhausted by April 30 because the Federal Government has dissipated the pay roll tax collections and Congress has not made the appropriation to replenish them. With the money in this "trust fund" squandered, another pay roll tax levy must be viewed with disapproval.

Aside from the fact that another pay roll tax for health insurance might force many employers to reduce their employee rolls and create more idleness and hardship, the workers look askance at forced deductions from their pay checks. They dislike the precedent it sets. They fear further levies of the kind. Also the idea of compulsory this and that is becoming increasingly repugnant to Californians and Americans, regardless of the good intentions of those who would saddle them with compulsions.

Furthermore, a voluntary plan of health insurance and medical care is being formulated by the California Medical Association. The Association should be afforded an opportunity to show what it can offer before the state goes into the medical business. Medical circles may not be free from politics, but their brand is infinitely to be preferred to control by politicians in Sacramento. If the medicos' voluntary plan fails to receive support, there will be time enough to consider compulsion. And that time should be in a period when the state can better afford costly experiments than in the hard-pressed present.—*Stockton Record*, April 12.

\* \* \*

#### An Editor's Viewpoint

What could be more suspicious than legislation, ambiguous in its wording and for the politician rather than for the people in its inception?

What could be more unfair to the great majority of citizens than legislation which demands donations from the class of \$3,000-and-less-a-year workers, the same group which already contributes, out of its pay checks, for social security and unemployment insurance, money badly needed,

in many instances, for the primary necessities of day by day existence?

What could be more staggering than legislation providing for a tax which, when added to the already existing wage slices, would raise the total pay roll tax rate to nine per cent?

What could be more illogical than legislation which, actually necessitating medically trained administration, would be handled instead by diamond stickpin machine-bought politicians; or would, in effect, compel physicians to become politicians?

We answer our own questions when we urge the defeat of the compulsory health insurance bills, Senate Bill No. 1128 and Assembly Bill No. 2172.—*Madera News*, April 6.

\* \* \*

#### Health Insurance

We think it is high time that St. Helenans think long and carefully about this matter of health insurance, which is certain to occupy the public attention in the immediate future. Some kind of socialized medicine is bound to come. The question before Californians is the what and how of its administration.

Pending before the Legislature are two bills, Senate Bill 1128, and Assembly Bill 2172, which provide for compulsory health insurance, paid for by additional taxation. Get this additional part clearly, for under the compulsory plan as proposed by the authors of the bills, pay roll taxes up to 9 per cent of the state's entire pay roll can be levied to keep it going, together with the other social security undertakings of the state.

Some 3 per cent alone, of the pay roll of the state, will be taken to operate the plan, and there is no assurance that much higher taxes will not be required, once the machine gets going. How can an overburdened business structure take on more deductions?

But the additional taxation feature of the compulsory state idea is not the worst part of the plan. Bad as that is, it cannot compare with the evils of a new machine set up in Sacramento to dictate to every person whose income is under \$3,000. A new bureau added to all the other bureaus is just one more prop in the structure of state centralization whose encroachment our town, as well as most others, has steadily fought.

Such a state compulsory setup is bound, it cannot fail, to be ridden with politics. A glance at the headlines any day is proof that it would be a deplorable mistake to trust the lives and health of the great mass of our citizens to the tender mercies of politicians; the administration of state compulsory health insurance would soon reach the same low level as the present handling of other social welfare functions of the state government. And costs would mount steadily under a bureaucracy determined to keep itself in office and add to its powers. It just isn't in the cards for the state to handle such a setup efficiently.

Fortunately for the idea of low cost social medicine, there is another plan, a voluntary plan, but one which previous trials indicate would work. That is the plan now being perfected by the California Medical Association, and which will be introduced to Californians in the very near future. It avoids the evils of compulsory state machine control.

Under the Medical Association's proposal, persons with an income up to \$3,000 annually would receive medical and hospital care for \$2.50 per month. In other words, an insurance policy, for which you pay \$2.50 monthly, entitles you to go to your own doctor, not one the state appoints for you, and receive medical attention, and hospitalization, if need be, at no further cost.

The plan is administered by a corporation set up by the physicians themselves, you pay the monthly premium to the corporation, and receive what medical hospital attention you need, and the corporation in turn pays your doctor and your hospital from the fund created by the premium payments of others. Based on long time surveys of medical costs in the United States, the plan is acclaimed as financially sound. It has worked on a small scale already.

It has the advantage of low cost administration by the physicians themselves, no high salaried politicians with the state's taxing power as a weapon can jack the administrative expenses to unworkable heights. Moreover, the figure quoted, \$2.50, is for individuals, according to physicians who have been active in devising the plan, a lower rate for families or for groups is entirely possible and probable.

There is no doubt in our mind which is the preferable plan, and which will offer the best solution to the problem of reasonably priced medical and hospital service to the medium income brackets. Some form of group health insurance is bound to come for the great mass of the people who are not wealthy, yet who are not destitute but upon whom illness bears most heavily.

The choice between a forcible state plan with all the attendant evils of governmental administration, and a work-

able proposal by physicians themselves is obvious. As St. Helenans study the two plans submitted to Californians they will come to the same conclusion, and that is to bend every effort to defeat any state compulsory idea in order that the more practical voluntary physicians' plan may be given the right of way.—St. Helena Star, April 7.

\* \* \*

#### Health Bills Will Be Aired by Committees Legislative Battle Looms Over Compulsory Insurance Proposals

Sacramento, April 8.—Political maneuvering has started in the legislative battle over compulsory health insurance, with the first open skirmish expected at a joint senate-assembly committee hearing on the evening of April 19.

At that time the assembly committee on unemployment, headed by Assemblyman Fred Reaves of Los Angeles County, will consider A. B. 2172, sponsored by Assemblyman Rosenthal, an Olson administration floor leader, and fifteen other Democrats.

Senator John Phillips of Riverside County, chairman of the upper house committee on social security, pensions and relief, announced today his group will meet with the Reaves committee, by invitation, to listen to the pros and cons of health insurance.

#### Will Speed Action

Phillips said that if the assembly approves A. B. 2172, the senate committee plans to take it up for action April 27. Otherwise, the senate committee will take up a companion measure, S. B. 1128, by Senators John Shelley of San Francisco and Robert Kenny of Los Angeles.

"A great deal of opposition is developing against these compulsory health insurance proposals," said Senator Phillips, "especially from small business men who claim their operating costs would be increased materially by any such system."

That, judging from reports in other quarters, is the gist of the argument which will mark the anticipated legislative battle.

#### Olson Backs Move

Governor Culbert L. Olson is definitely committed to the policy of compulsory state health insurance and has told the Legislature so.

Business, or at least a large part of it, apparently is preparing for a determined fight to kill any such legislation. Its major contention is understood to be that employers, already making social security and unemployment insurance contributions, cannot carry any additional pay roll taxes.

Compulsory health insurance, as proposed in the senate and assembly bills set for hearing, would be financed by the contributions of workers and employers, based on pay rolls. . . .

The Shelley-Rosenthal bills call for a plan of compulsory health insurance integrated with the existing state system of unemployment insurance and designed to furnish medical and hospital service to low salaried workers. The bills also provide the same service, on a voluntary basis, for persons within certain age groups who are not eligible under the compulsory program.

#### Broad Program

The plan is broad enough to include general medical services, hospitalization, specialists' services, nursing, laboratory analyses, x-ray diagnosis, dental surgery and drugs and medicines among its benefits.

Maternity cash benefits are proposed for women wage earners whose annual compensation is not more than \$3,000.

Fund contributions would begin, under these two identical bills, next January. Benefit payments would start in January, 1941.

Contributions of employees from their wages and employers from pay rolls are proposed, beginning next January as follows:

On monthly wages under \$70—nothing from the workers; 2 per cent from the employer. On wages from \$70 to \$100—½ per cent from the worker; 1½ per cent from the employer. On wages from \$100 to \$200—1 per cent from the worker; 1½ per cent from the employer. On wages over \$200—1½ per cent from the worker; 1 per cent from the employer.

State contributions would be made after July 1, 1941.

#### Must Register

Physicians and surgeons wishing to serve state insurance beneficiaries would register under the proposed code for that purpose.

The system would be administered by a bureau of medical service in the state department of employment.

The medical director in charge would be chosen by civil service methods, but would have to be a physician and surgeon with at least ten years of active practice. For the purpose of administration, the state would be divided

in medical service districts, each district supervisor having at least five years of experience in medical practice.

A state bureau advisory council would consist of three representatives of labor, two representatives of employers, a physician and a representative of the state's medical schools.

#### Hit Appropriation

Adversaries of this program expressed elation a few days ago at assembly action for removal of a \$200,000 item on health insurance from Governor Olson's budget.

Frankly committed to health insurance legislation, Olson included the \$200,000 in his budget to cover initial expenses and open diagnostic laboratory centers.

Critics in the assembly insisted that the appropriation be taken out of the budget and considered later when the actual health insurance measures are taken up. They feared the budget item would commit the Legislature in advance on the controversial health proposition.

Among other pending proposals on various phases of the health insurance question are S. B. 551 and 548, Hollister, and A. B. 2494 and 2501, Garland.—Modesto Bee and News Herald, April 8.

\* \* \*

#### State Health Insurance Program Attacked

Many drug stores will be transformed into soda fountains if the Olson-sponsored compulsory health insurance program becomes law.

That was told the San Francisco Optimist Club yesterday by Dr. Morton R. Gibbons, Jr. Active in civic circles, Doctor Gibbons explained the workings of both the voluntary health insurance plan of the medical association and the state system.

He asserted the Physicians' Health Service would not alter the "physician-patient relationship." The doctor also indicated a higher standard of medical service would be available under the voluntary plan.

The state system would supply drugs to the patient, in contrast to the voluntary plan, and "of necessity" would hurt the druggists, he said.

Doctor Gibbons stated any health program must solve three major problems:

1. The "severe" tragedy when illness strikes a family with an income of less than \$2,000.
2. Fixed charges of hospital, laboratory involved in treatment of the patient.
3. Just compensation for reliable physicians, who have spent some \$20,000 and eight years in preparing for their profession.

Don B. Wentworth, Optimist president, presided.—San Francisco Chronicle, April 13.

\* \* \*

#### Trimming the Budget

The efforts of the state assembly to trim the Governor's budget resulted in a reduction of some \$2,000,000 in the proposed appropriations exclusive of elimination of \$500,000 pension increases, but that sum does not make much of a dent in a total of \$557,000,000.

The \$30,000,000 slash proposed by the minority report of the Ways and Means Committee is the program that needs adoption.

Removal of the \$200,000 item for starting compulsory state health insurance, believed to kill this program for the session, is a bigger help than appears on the surface, however, since the sum proposed would merely start an extremely expensive program supported by back-breaking taxation.

Removal of the \$73,000,000 relief appropriation from the bill does not itself cut the budget, since relief must then be provided in a separate bill, but it does give opportunity to slice the total and safeguard expenditures so the money will go for relief and not for experiments in state Communism.

A real cut in the budget is urgently necessary because of dropping state revenues. Tax collections are off considerably, including the sales tax receipts, and state indebtedness is soaring to new heights. The state controller says it will be \$66,000,000 by July 1 and \$85,000,000 by this time next year.

Also, the budget is not the whole story. Appropriation bills in the Legislature outside the budget are said to total \$200,000,000. Public pressure must be exercised to prevent their passage.

California is a sound and solvent state, but there is no sense in endangering it by extravagance. The Legislature should do its duty and keep appropriations within proper bounds.—Los Angeles Times, April 13.

\* \* \*

#### State Control of Hospitals

Senate Bill 1874, now under consideration at Sacramento, provides, "The State Department of Public Health is re-

sponsible for the control or administration of all public medical care activities . . . in the state."

This is one of those proposals designed to intrude further and further upon local control of local affairs, lodging all public authority and all public jobs in the Sacramento bureaucracies.

Theoretically, by placing every county and other public hospital under Department of Health jurisdiction, standards of practice and treatment would be raised, and, of course, it will be argued that state management would be "more efficient and economical."

We might, or might not, have better county hospitals if they were taken under the wing of the state. But it is extremely doubtful if the cost would be as little as it is now. The bureau would send its own doctors and nurses in. It would, as provided in paragraph E of Section 1 of the bill, "cooperate with counties in promoting expansion of necessary hospitals, clinics and other facilities"—which is throwing the door wide open for grandiose schemes that many little counties could not possibly afford.

The state will do well to place its own house in order before trying to supplant any more county functions and departments.

Government should be as close as possible to the people. Every citizen should be made to feel "The cost of this is coming from my own pocket." Everyone knows the attitude of people towards activities directed from Washington or Sacramento. At such a distance, the average citizen conceives of a governmental agency as a Santa Claus, not as a close neighbor whose every movement is known and understood. And Santa Claus is thought of as having a bottomless sack, filled with gold and blank checks.—*Quincy Feather Inn Bulletin*, April 6.

\* \* \*

#### Medical Society Opposing Health Program of Olson

Sonoma County Medical Society last night unanimously opposed the Olson administration's compulsory health insurance program and endorsed the California Physicians' Service plan.

Preliminary steps were taken toward calling a joint meeting within a few weeks of professional and business groups in Santa Rosa to explain the reasons for such action, officials explained.

Dr. L. W. Hines, chairman of the society's Public Relations and Legislative Committee, presented his report before action was taken.

The nine contentions given by the society officers for opposing the administration's health insurance program follow:

1. Panel system under which each doctor is given a list of families who must go to him unless they move to another district.
2. No rate of pay per patient as the governing authority sets the fee schedules. The schedules may be changed any time by the authority.
3. Act control is under a governing board comprised of three men from leading labor groups, two representing employers, one from medical schools and one representing panel physicians.
4. Specialty services are not taken care of except in public diagnostic centers by state salaried specialists not conveniently located for all localities.
5. Provides group units of licensed physician (a doctor and staff of low salary men may furnish all kinds of services and be paid special rates).
6. Pay roll deductions probably do not cover cost of adequate medical service in hospitalization as such covers an employee and all dependents.
7. No definition of general practitioner's services. Doctors are paid by the number of names on his files, not by services.
8. Risk from insurance system is placed on the doctor loaded beyond capacity to render sound, qualified medical care.
9. Medical care is placed in the department of employment.

The action of the society was taken against Assembly Bill 2172, Senate Bill 1158 and a measure 551.

The association also went on record opposing the county hospital bill 2499.

The organization voted itself unanimously in accord with the health service plan of the California Medical Association.

D. C. Oakleaf, president, presided at the meeting in the Occidental Hotel.—*Santa Rosa Republican*, April 1.

\* \* \*

#### Health Agreement Ready for Signing

Final steps for signing of agreements with three non-profit hospital associations were taken today by officials of the California Physicians' Service.

Actual completion of the agreements, expected within a week, will signalize start of the signing by the physicians' service of groups of patient members.

The hospital groups which already have agreed to cooperate with the physicians' service are the Insurance Association of Approved Hospitals, in San Francisco and Bay area; Intercoast Hospitalization Insurance Association, headquarters at Sacramento, and Associated Hospital Service of Southern California.

#### Represent 80 Per Cent

They represent 80 per cent of the state's hospitals, with the exception of government institutions and hospitals which do not provide full service, physicians' service officials estimated.

Cost of the rival health plan, Governor Olson's compulsory health insurance program, meanwhile, was estimated at \$81,000,000 annually as bills which would launch the state service awaited legislative action.

The estimate was made by the State Department of Employment, which reported \$19,677,000 would have to be raised by taxation of employees' salaries, \$29,998,500 through additional taxes on employers and \$10,000,000 through classification of workers not now affected.—*San Francisco Call-Bulletin*, April 13.

\* \* \*

#### Hospitals Join Doctors' Group

##### Three Associations in California Sign Up for Service

San Francisco, April 12 (AP).—The California Physicians' Service, new agency of organized medicine designed to meet the demand for health insurance, today announced it has signed agreements with three large hospital associations.

The announcement said the agreement will make available for the new service about 80 per cent of the hospitals in California, excluding government-owned institutions and those not providing full hospital service.

The associations with which agreements were signed are the Intercoast Hospitalization Insurance Association of Sacramento, the Insurance Association of Approved Hospitals, a group in the Bay area, and the Associated Hospital Service of Southern California, which has the facilities of many institutions in that territory.

The announcement said about 4,700 physicians have signed up to give service. The association previously announced it planned to enlist all licensed physicians in the state, in order that its beneficiary members might have their individual choice of physicians.—*Los Angeles Times*, April 13.

\* \* \*

#### U. S. P. H. S. Survey Starts; Schools to Be Included

Dr. Francis A. Carmella, supervising surgeon in charge of the eleven western states for the United States Public Health Service, arrived here on Tuesday morning with three members of his special staff to start the survey of the San Mateo County Department of Public Health.

The survey, he announced, will include the schools. While school nurses are not part of the county department, he explained, the nursing service and physical sanitation of the schools are properly parts of the survey.

Doctor Carmella met with County Executive Frederick Peterson, members of the board of supervisors, and members of the county board of health prior to taking over the U. S. P. H. S. offices in the service division building back of the court house.—*Redwood City Times Gazette*, April 7.

\* \* \*

#### Osteopaths Protest Listing by Health Board

Osteopaths and chiropractors protested to the San Francisco Municipal Retiring Board last night against being placed on a panel separate from medical doctors in the city employees' health insurance system.

The Retirement Board took their protests under consideration. Representatives of the two nonmedical groups insisted upon being included in health service plan No. 1, which is now in operation, rather than a proposed special service plan.

The second plan, adopted by the Employees' Health Service Board, would segregate \$1 per month from the \$2.50 payments of members adhering to it to meet chiropractors' and osteopaths' bills. Fees would be the same as for medical doctors—\$2.50 per office visit, \$3.50 for home visits and \$7.50 for a night visit.

The plan would include the unit rule, under which available funds could be divided among practitioners as far as they would go each month. The fee schedule must be approved by the Retirement Board before it can become effective.

It was brought out that 198 of the 12,000 members of the insurance system had signified a desire to have the services of other than medical doctors. Those electing to be under Plan Two would have the services in case of physicians and surgeons in case of hospitalization.

Attorney Newell J. Hooey, representing chiropractors, and Dr. W. W. Vanderburgh, for the osteopaths, demanded that employees have free choice of physicians, medical or otherwise.

"You cannot mix doctors of medicine and chiropractors," King declared, indicating the same observation went for osteopaths. "We are trying to meet this situation the best way we can."

Miss Murial S. Pettit, Balboa High School teacher, asked that city employees who wish the services of chiropractors and osteopaths be allowed to have them under the existing plan or that such members be allowed to withdraw.—*San Francisco Chronicle*, April 12.

\* \* \*

#### Clubwomen Boo State Medicine Debate Speaker

*Criticism of Doctors by Fresnan Proves Unpopular at Convention*

Porterville (Tulare Co.), April 13.—Criticism of opponents of state medicine and particularly physicians opposed to such plans by Rev. J. Covington Coleman of Fresno at the convention of the San Joaquin Valley Federation of Women's Clubs here yesterday drew hisses and boos from the delegates.

Dr. Elliot Sorsky of Fresno, opposing state medicine, had charged the plan had failed in other countries.

Rev. Covington's sharp answer, in which he criticized doctors who "first looked at the pocketbooks of their patients," drew the hisses from a large number of the delegates. . . .

Doctor Sorsky opposed the Governor's plan as described by Mrs. Geballe. He said his arguments were based mainly on his study of socialized medicine in England and forty-five other European countries where different methods are in use. He said he did not believe statistics, however accurate, answered the problem. He asserted that if statistics are to be used, it should also be noted that in European countries, having socialized medicine, the death rate from tuberculosis and other diseases is double that in this country. . . .—*Fresno Bee and Republican*, April 13.

\* \* \*

#### Health, Bond Bills Headed for Defeat

*Action on Compulsory Medical Insurance Postponed by Committee; Four-Hour Hearing Held; Sheriff Murphy, Rowell, Doctor Armstrong Argue in Favor of Measure*

Sacramento, April 20.—Two major points in the program of Governor Olson—compulsory health insurance and revenue bonds—today appeared headed for defeat in the Legislature in the wake of committee hearings.

Coming as a surprise move, the assembly's unemployment committee last night postponed action on the compulsory health insurance bill until next Tuesday, after a four-hour hearing in which proponents and opponents aired their views and received applause from crowded galleries.

Most of the arguments advanced by both sides were familiar ones—advocates of the bill contending it would benefit wage earners and medical men alike and would be a tremendous step forward; opponents insisting it smacked of dictatorship and would, by its tax phases, drive pay rolls out of California.

Among those who advocated the bill were Sheriff Dan Murphy of San Francisco, Chester Rowell and Dr. Barbara N. Armstrong. Opposition speakers included Dr. Sanford M. Moose of the California Dental Association, Dr. Samuel Ayres of Los Angeles and George W. Kemper of the Association of Accident and Health Clubs.

#### Prospects Are Dim

The committee is 5 to 2 in favor of the administration, and postponement of favorable action on the measure came as a surprise. However, this isn't expected to affect the eventual action of the committee. It undoubtedly will recommend the bill, but there is every indication the measure will be killed once it reaches the floor.

The senate committee, which sat in on last night's hearing, is opposed to the plan, and from all indications, won't even report out a companion measure to the senate. . . .—*San Francisco News*, April 20.

\* \* \*

#### California Health Bill Is Snagged

*Liberal Leaders Admit Measure Cannot Pass*

Sacramento, April 10.—In spite of radio pleas on the subject by Governor Culbert L. Olson, liberal leaders in the State Capitol admitted today they had virtually abandoned

hope of passing any compulsory health insurance act through this session of the Legislature.

What hope they had held since the administration was forced to agree to take a \$200,000 health insurance appropriation out of the budget went glimmering with a ruling from Legislative Counsel Fred B. Wood, who said:

"Any bill making an appropriation passed after the budget bill will be ineffective unless it receives a two-thirds vote, regardless of the number of votes the budget bill itself receives."

#### Take Out Item

Yielding to a vigorous Republican attack, Assemblyman Ben Rosenthal of Los Angeles, chairman of the Ways and Means Committee and author of the budget bill, announced he would delete the \$200,000 health insurance item.

This means that the money must be provided in the actual health insurance bill itself—and according to Wood's ruling under the Riley-Stewart 5 per cent limitation in increased expenditures must get a two-thirds vote of the elected membership of both houses.

Even the most ardent administration supporter today admitted small chance that the controversial compulsory health insurance could get a two-thirds vote, and it was known that Rosenthal was being urged by some to go back on his compromise and put up a fight to keep the item in the budget.

Whatever the fate of health insurance, the Legislature reconvened today after the week-end recess and administration leaders in the assembly pressed on with their fight to save the budget from complete emasculation.

#### Half Billion Budget

Democrats in the lower house went into session today after individual talks from the Governor, who told them all in no uncertain terms that he expected their support in the budget.

As a record-high half billion dollar budget came up as a special order of business again, however, Republican leaders in the assembly claimed to have enlisted enough support to push through many amendments.—*Los Angeles Herald and Express*, April 10.

\* \* \*

#### Senate Would Adjourn May 5

*Assembly, However, Has Deciding Voice on Resolution*

Sacramento, April 13 (AP).—The California senate resolved today to adjourn its fifty-third session May 5. The resolution must be adopted by the assembly before it can become effective.

The senate voted, 26 to 8, in favor of the resolution, introduced by Senator Jerrold Seawell of Roseville, Republican whip.

Speaker Paul Peek of the assembly, chairman of the State Democratic Central Committee, said he sees no possibility of such early adjournment.

Most of the thousands of bills introduced into the Legislature are still awaiting action. The only major legislation enacted so far is the \$16,000,000 emergency relief appropriation.

Senator J. C. Garrison, Modesto Democrat, suggested adjournment be set for May 25, and Senator Jesse Mayo, Angels Camp, Republican, commented the Legislature would not be through with its work until June 5.—*Los Angeles Times*, April 14.

\* \* \*

#### Pre-Marriage Tests Spread

Chicago, April 9 (AP).—The Council of State Governments today reported that six states, Indiana, North Carolina, North and South Dakota, West Virginia and Colorado, have approved pre-marital blood test laws in current legislative sessions, bringing to sixteen the total of states with such measures. The Colorado bill, however, still lacks the Governor's signature. The new laws will become effective either this year or next.

Ten other states had previously enacted blood test laws—Connecticut, Illinois, Kentucky, Michigan, New Hampshire, New Jersey, New York, Oregon, Rhode Island and Wisconsin. Ten additional states ask certificates or affidavits from one or both marriage partners that they are free of venereal disease.—*Los Angeles Times*, April 10.

\* \* \*

#### Los Angeles Medical Center to Seek Socialized Plan

Sacramento, April 25 (AP).—Establishment of a socialized medicine plan will be sought by the Los Angeles Medical Center, which had filed articles of incorporation with the secretary of state today.

Directors are Norman F. Sprague, Dain L. Tasker and Glenn B. Chadwick of Los Angeles.—*San Francisco Call-Bulletin*, April 25, 1939.

## LETTERS

**Subject: Recent trial and comment thereon by member of Los Angeles Bar.**

DEPARTMENT OF PROFESSIONAL AND VOCATIONAL  
STANDARDS  
BOARD OF MEDICAL EXAMINERS  
STATE OF CALIFORNIA

San Francisco, California  
April 25, 1939.

Re: Abos vs. Martyn, D.C.

To the Editor:—We enclose herewith a clipping from the Los Angeles Journal, April 14, 1939, which we think is worthy of reproduction in full in CALIFORNIA AND WESTERN MEDICINE.

Therein is related that a boy, who subsequently was shown by autopsy to have been suffering from "tuberculosis of the meninges of the brain, or coverings of the brain," was assertedly treated by —, an advertising chiropractor, who took x-rays and told the parents that the second x-ray showed that the boy's third vertebra was misplaced and that he needed chiropractic adjustments, whereafter Chiropractor — assertedly administered several chiropractic adjustments. The boy grew progressively worse and finally died.

The comments made by Harry Graham Balter of the Los Angeles Bar, author of the enclosed article, are very pertinent, particularly his comment on the "apparent inability of society to protect itself from untrained or careless persons who attempt to heal beyond the scope of their training and experience," and his further suggestion that California is unique in its failure to adopt educational safeguards (long urged by you) for adequate training of the non-medical practitioner in the basic sciences.

The author closes his article with the sentence: "Perhaps the stilled voice of little Leopold Abos will attract powerful social advocacy to right this tragic social danger."

Very truly yours,

C. B. PINKHAM, M.D.,  
Secretary-Treasurer.

### CASE OF THE WEEK\*

Chiropractors—Malpractice—Wherein a tragic case is presented which should galvanize society into action—but probably won't.

There are probably more doctors per potential patient in this area than anywhere else in the country. Not only do we have the most motley assortment of patients, but as well the choicest collection of practitioners and "doctors" of "off" varieties.

I realize how dangerous it is for one to level criticism at the chiropractor, osteopath, neuropath, and the rest. But when you are presented with a situation such as the Second Appellate District, Division One, dealt with in the case of *Abos vs. Martyn* (97 Cal. App. Dec. 26, decided March 27, 1939), how can one help but raise a voice of protest against the apparent inability of society to protect itself from untrained or careless persons who attempt to heal beyond the scope of their training and experience?

In that case the mother of a youngster, named Leopold Abos, noticed that he was "stooping a bit"; the boy said it was painful for him to stand erect since a boy bumped him at school; at about December 1, 1932, the parents took the boy to the defendant, Dr. Clyde A. Martyn, an advertising chiropractor, who took x-rays and told the parents that the second x-ray showed that the boy's third vertebra was misplaced, and that he needed chiropractic adjustments; that Doctor Martyn said, "Don't treat him like a sick person, because he is not sick." Doctor Martyn administered five

or six adjustments after which the boy developed fever; that the doctor had the boy put to bed, advising a liquid diet because of his fever, and continued the adjustments regularly until about a week before the boy died, which took place in April, 1933. When the parents became alarmed, Doctor Martyn told them, "No doctor could do more than what I am doing . . . the only thing the boy has is a certain pressure on the spinal cord, on account of the misplaced vertebra, and I am doing the best thing and nothing more could be done for the child."

To add to the tragedy, two or three weeks before the child's death, Doctor Martyn advised the parents that, in his opinion, the vertebra was practically in place and that the child's illness would soon be over. On further questioning at the trial, Doctor Martyn had this to say:

"Q. Did you make any diagnosis of his condition at that time?"

"A. In chiropractic, we don't use the term 'diagnosis.' I take it that you want to know if I placed a name on his condition?"

"Q. Yes. I want to know if you came to a conclusion?"

"A. Yes, I came to a conclusion, but in chiropractic we term it 'analysis,' instead of 'diagnosis.' . . . My analysis was that he had a subluxation of the second cervical vertebra, causing an impingement of the nerves at that point. . . ."

"Q. Well, was that an impingement of the nerves or of the cord?"

"A. Well, it might have been from both. It was apparent from his condition that there was inflammation of the cord. The inflammation might have been from pressure on the spinal nerves or upon the cord itself."

"Q. So, it was your finding and your conclusion that at all times, from the time of your first treatment to the last, there was some inflammation and congestion of the spinal cord at the region of the cervical vertebra?"

"A. Yes."

As a witness for the plaintiff, the autopsy surgeon testified that: "There was no evidence of spinal or other injury. . . . I had been informed that there was some spinal condition existing, and I therefore examined the spine to see if I could find any abnormality, which I did not find." The proper diagnosis, according to the autopsy surgeon, was "tuberculosis of the meninges of the brain, or coverings of the brain."

"Q. What is the medical effect of a chiropractic adjustment upon the cervical vertebra—particularly the second cervical vertebra, when tuberculosis of the spine exists?"

" . . ."

"A. It would be detrimental, as rest and quiet would be absolutely indicated in those cases, and that would not pertain to rest and quiet."

"Q. Would it accelerate or increase, in your opinion, the inflammation existing?"

" . . ."

"A. It would."

Two medical doctors and a chiropractic doctor testified that if the boy's case had been properly diagnosed and had been given proper treatment at the outset he would have recovered.

The verdict of \$10,000, based on malpractice, was sustained by the Appellate Court.

The significance of the case lies not in its enunciation of the familiar principles of law which are basic in a malpractice suit (for another recent case discussing these principles see: *Engelking vs. Carlson*, 97 C. D. 364, March 24, 1939), but in the dramatic presentation of a dangerous situation.

Must one be accused of being unfair to the nonmedical practitioner if he insists that the healing and treating activities of those not thoroughly trained in medicines and diagnosis must be restricted to administering only to the extent of the basic limitations of their training, and that if such limitation is not adhered to society should enact punitive measures to adequately protect itself?

\* By Harry Graham Balter of the Los Angeles Bar.

A survey of pertinent legislation in other states, I believe, will show that California is unique in its failure to adopt these safeguards.

Perhaps, the stilled voice of little Leopold Abos will attract powerful social advocacy to right this tragic social danger.—Los Angeles Journal, April 14, 1939.

**Subject: Report on an interesting California medical-legal case.**

San Francisco, California,

April 7, 1939.

Re: *Tator vs. Pacific Employers Insurance Company*, (also known as *Pacific Employers Insurance Company vs. Industrial Accident Commission and Kenneth Tator*.)

To the Editor:—You will recall that in the above entitled action we appeared before the California Supreme Court on behalf of Drs. Quigley, Majors and Cary, who rendered professional services to Kenneth Tator, the injured employee. As previously reported to you, the California Supreme Court decided the case in favor of the injured employee and the doctors and against the Workmen's Compensation insurer. Also, as previously reported, the insurance company then appealed to the United States Supreme Court.

We are advised that on March 27, 1939, the United States Supreme Court affirmed the decision of the Supreme Court of California. We have not as yet been able to obtain a copy of the opinion of the United States Supreme Court, but the following item appearing in the San Francisco *Recorder* on March 28 sets forth the substance of the decision and a brief history of the litigation:

"Washington, March 27.—The Supreme Court of the United States, in a decision written by Justice Stone and announced this morning, affirmed the action of the Industrial Accident Commission of the State of California and the decision of the California Supreme Court in the case of *Pacific Employers Insurance Company vs. the Commission and Kenneth Tator*. The question involved was one of a conflict between the law of Massachusetts and the law of California, and the Supreme Court upheld the application of the California law.

✓ ✓ ✓

"In 1935, Kenneth Tator, a chemical engineer, was sent by his employer, the Dewey & Alma Chemical Company, from its plant in Massachusetts to its plant in Oakland. On October 17, 1935, Tator received a serious injury to his hand while working at the Oakland plant. He filed an application with the Industrial Accident Commission seeking benefits under the California Compensation Act. The Pacific Employers Insurance Company carried the chemical company's compensation insurance in California, and the Hartford Accident & Indemnity Company carried such insurance in Massachusetts. The Pacific Employers contended the liability was that of the Hartford on this ground.

"The Massachusetts Compensation Act provides that one employed in Massachusetts elects to be governed by the Massachusetts Compensation Act for injuries no matter where sustained. The California Compensation Act provides that it governs over all injuries sustained in the State of California regardless of where the contract of employment is entered into.

"The Industrial Accident Commission held the Pacific Employers liable, and that insurance company appealed by writ of review to the California Supreme Court.

"Briefs were filed and the matter argued by Attorneys G. S. Keith and Frank J. Creede in behalf of Tator, and Everett A. Corten in behalf of the Industrial Accident Commission. An amicus curiae brief was filed by Hartley F. Peart and Howard Hassard in behalf of numerous California doctors who wished the action of the Industrial Accident Commission upheld on the ground that California

doctors who treat injured men in this state should be able to seek payment of their bills here rather than go to some other jurisdiction.

"The California Supreme Court upheld the award in favor of Tator. The Pacific Employers Insurance Company thereupon obtained a writ of review in the United States Supreme Court. William H. Mullen argued the matter in Washington on behalf of Pacific Employers. Everett A. Corten and Frank J. Creede likewise argued the matter before the United States Supreme Court.

"The Supreme Court has now held that the California law is applicable and the liability is that of the Pacific Employers Insurance Company rather than the Hartford Accident & Indemnity Company."

The decision of the United States Supreme Court now settles once and for all the right of an employee to secure compensation in the state in which he is injured. It further settles the right of doctors who render services to such injured employees to be paid in the state in which they rendered services. This is of great importance to all physicians doing industrial work, because otherwise in many cases it would be necessary to proceed for compensation in distant places.

111 Sutter Street.

Very truly yours,

HARTLEY F. PEART.

**Subject: Enforcement of Medical Practice Act.**

San Francisco, California,

April 8, 1939.

To the Editor:—We enclose herewith a report by Special Agent Williams dated April 7, 1939, which clearly sets forth the difficulties in enforcement of the Business and Professions Code relating to the practice of medicine.

We thought the information contained in the enclosed letter would be most illuminating for readers of CALIFORNIA AND WESTERN MEDICINE.

Very truly yours,

C. B. PINKHAM, M. D.,  
Secretary-Treasurer.

✓ ✓ ✓

(COPY)

San Francisco, California,

April 7, 1939.

C. B. Pinkham, M. D.

Board of Medical Examiners

214 - 515 Van Ness Avenue

San Francisco, California.

Re: Henry Wong, Chinese Herbalist.

Dear Doctor Pinkham:

Supplementing my report of February 14, 1939, re: the above Chinese herbalist, whom I arrested in Salinas on March 24, 1939, on two counts of violating Section 2141 of the Business and Professions Code, I am giving you herewith the final disposition of the case.

On March 29, 1939, the above case went to trial before a jury and Harry J. King, Justice of the Peace, Salinas.

Following two days of testimony, most of which was produced on behalf of the prosecution the case went to the jury for deliberation at 5 p. m. on March 30, 1939, and after several hours' deliberation a verdict of not guilty was returned at 9:30 p. m. that day.

Four witnesses testified for the prosecution to the fact that Wong had represented himself as being a doctor; had examined and diagnosed their condition; prescribed and treated for same. Evidence was also produced and corroborated that Wong had used certain anatomy charts showing the cross section of the human organs in his diagnoses and had pointed to the ureters shown on one of said charts and called them prostate glands, telling the patient

that they (prostate glands) were the cause of patient's condition.

Mr. — of Soledad, California, testified that several months ago he had gone to the defendant. Wong examined him and told him he had gonorrhea. He further testified that Wong treated him over a period of several weeks for which Wong charged \$30 a week and that he paid Wong a total of \$315 for said treatment.

B— further testified that, prior to going to Wong, he had been examined by Doctor Chase of Soledad, and Doctor Chase had found no trace of a gonorrhea condition. After going to Wong for many weeks, he spent four days in the University of California Hospital in San Francisco, where urology specialists made thorough examinations and were unable to find any trace of gonorrhea, but that he had a bladder condition which was entirely divorced from a social disease.

B— did not state as to why he happened to go to Wong in the first place, but did state that his reason for spending so much money with Wong was due to the latter's convincing argument.

The defendant then took the witness stand on his own behalf and virtually admitted everything of which he had been accused. The only part of the evidence against him that he denied was the part that showed he had felt the patient's pulse. He claimed to only shake hands. However, he admitted treating — for gonorrhea, prescribing and treating the other patient, who had testified and admitted that he had told the undersigned that his ureters were prostate glands which were infected and causing a serious condition.

At the end of Mr. Wong's testimony, the defense rested its case.

In addition to the testimony of four witnesses, all of which was corroborated by other witnesses and by stipulation, we had a large supply of evidence, which is included in the memorandum of evidence and testimony, produced at the trial, which is attached herewith and is too lengthy to include in another report.

Subsequent to arguments by counsel and instructions given by the judge, the case went to the jury and it was remarked by both the judge and the defense attorney that the jury would return a verdict of guilty. It was further stated by the judge that if they did not find the defendant guilty, it would not be because of lack of evidence, but because "they don't want to." The defense attorney said that the best he could hope for was a disagreement. However, I think we were all quite surprised at 9:30 that evening when the jury brought a verdict of not guilty.

Very truly yours,

JOSEPH W. WILLIAMS,  
*Assistant Special Agent.*

**Subject: Pacific Science Congress.**

(COPY)

NATIONAL RESEARCH COUNCIL

Washington, D. C.,  
April 3, 1939.

*To the Editor:*—It may be recalled that since 1920 there has been held in several countries of the Pacific region a series of Pacific Science Congresses of which the fifth was held in 1933 at Victoria and Vancouver, British Columbia, under the auspices of the National Research Council of Canada.

It has recently been determined to hold the sixth congress of this series in the United States of America in 1939, under the general auspices of the National Research Council, and I am happy, on behalf of the Council, to extend to the California Medical Association a cordial invitation to participate in the Congress by the appointment of a number of its members as representatives on this occasion. We

shall be appreciative if you will let the Research Council know, when convenient, who these representatives are to be.

The Congress will take place in San Francisco and vicinity between the dates July 24 and August 12, 1939. Certain sessions of the Congress will be held in Pacific House of the Golden Gate International Exposition through the courtesy of the Exposition authorities. Other sessions of the Congress will be held on the grounds of Stanford University, near Palo Alto, and of the University of California at Berkeley, by courtesy of the authorities of these institutions.

Information concerning present plans for the Congress will be provided in advance announcements to be issued by the Council or by the Council's Committee on the Sixth Pacific Science Congress, of which Dean Charles B. Lipman of the University of California at Berkeley is the chairman.

We hope that word concerning the Congress can be given to the membership of the California Medical Association as widely as opportunity may afford, and that the interests of the Association in scientific problems of the Pacific region can be fully represented at the Congress both in the number of members who may attend and in contributions to the program.

2101 Constitution Avenue.

Sincerely yours,  
ROSS G. HARRISON, *Chairman.*

**Subject: Use of deceased licentiate's name.**

San Francisco, California.

March 28, 1939.

*To the Editor:*—We thought perhaps the readers of the JOURNAL might be interested in the enclosed opinion (NS1550), dated San Francisco, March 23, 1939, rendered by the Attorney-General, advising that the use of the name of a deceased licentiate is illegal.

Very truly yours,

C. B. PINKHAM, M. D.,  
*Secretary-Treasurer.*

✓ ✓ ✓

(COPY)

STATE OF CALIFORNIA  
LEGAL DEPARTMENT

San Francisco, March 23, 1939.

Charles B. Pinkham, M. D.  
Secretary-Treasurer  
Board of Medical Examiners  
San Francisco, California.

Dear Sir:

I have your communication asking whether, in the opinion of this office, a physician may legally use the name of a deceased physician and surgeon.

In reply, this office is of the view no person may use a name other than his own in connection with the announcement of or actual practice of medicine or surgery.

Section 2393 of the Business and Professions Code reads as follows and covers the question asked by you:

The use of any fictitious name, or any name other than his own, by the holder of any certificate in any sign or advertisement in connection with his practice or in any advertisement or announcement of his practice constitutes unprofessional conduct within the meaning of this chapter.

In the case entitled *People vs. Wilkes*, 163, N. Y. S. 659, a licensed physician advertised under the designation "Russian Medical Help. First Consultation Free." The New York law prohibited persons from practicing or advertising to practice under a name other than their own, in much the same language as does our statute.

The Court indicated that the purpose of the statute was to "effect definite identification of the practitioner, so as to prevent injury by fixing responsibility, which may be ac-

complished by the restraining influence of publicity, as well as by the ready means furnished by subjecting an offender to punitive discipline," and held the law violated.

If the use of such a name in an advertisement in connection with the practice of medicine is improper, so certainly would be the use of the name of a deceased licentiate.

Very truly yours,

EARL WARREN, *Attorney-General.*

By LIONEL BROWNE (Signed), *Deputy.*

## SPECIAL ARTICLES

### INDEX

1. *California Health Records Broken in 1938.*
2. *Wagner National Health Bill: An Impressive Measure.*
3. *Wagner Health Measure Called Huge Political Bribe.*
4. *United States Debt Forty Billions as "Ceiling" Near.*
5. *Average United States Income Told.*
6. *Mortality Rate at All-Time Low.*
7. *Social Security Survey Reveals Average Wage.*
8. *Cancer Control Month.*
9. *Preferred Proofs of Age.*

### CALIFORNIA HEALTH RECORDS BROKEN IN 1938

Death rates for typhoid fever, tuberculosis and diphtheria were reduced measurably in 1938 and it would appear that these rates may be approaching an irreducible minimum. The control of typhoid fever constitutes a typical example of the results that may be achieved through the application of standard practical measures that make use of the principles of engineering, sanitation and preventive medicine. In 1906, 32 out of every 100,000 people living in California died of typhoid fever, and in 1938 the death rate was 0.83 per 100,000 population. While the most outstanding reductions in deaths from these diseases occurred prior to 1920, there have been marked decreases since that year. In 1920 the typhoid case rates was 32.8 and the death rate was 4.9, as compared with a case rate of 7.1 in 1938 and a death rate of 0.83.

Let it be remembered that California is dependent largely upon surface streams for public water supplies and surface streams are much more liable of pollution than underground sources. Great vigilance must be observed, therefore, in the protection of public water supplies taken from surface sources. The fact that California has achieved a typhoid rate, under the circumstances, that is comparable to similar rates in states where sources are found mostly in underground supplies, may be considered a matter of pride to state and local health organizations.

Public water supplies are adequately protected and outbreaks due to contaminated milk supplies seldom occur at this time. The custom of irrigating vegetables with water from contaminated sources has been eliminated. However, Mexicans and Orientals commonly drink water from open ditches and other polluted sources. Local health officers occasionally find typhoid carriers and measures are instituted promptly to prevent occurrence of cases of disease through contact with carriers. Group cases occur occasionally but not often. Most cases are sporadic.

The large body of efficient local health officers scattered throughout the state have been trained in their duties and are alert in their activities to prevent the occurrence of cases of this disease. Public water supplies are treated so as to prevent the occurrence of illness through any contingency of contamination that might occur. Safeguards are thrown up everywhere and with the present machinery running efficiently, it is unlikely that an epidemic of typhoid

fever will occur anywhere except in the extreme rural districts.

The State Department of Public Health has led these activities through its sanitary engineering, sanitary inspection, and epidemiological functions. The Bureau of Sanitary Engineering, organized in 1915, approves of all plans for disposal of public sewage and for the provision of public water supplies. The Bureau of Sanitary Inspection directs many of its activities toward the protection of domestic water supplies and the abatement of faulty practices in domestic sewage disposal. The Bureau of Epidemiology assists local health officers in diagnosis, epidemiological investigations including detection of carriers and the control of cases of this disease.

Under state leadership, local health departments throughout the state have been instrumental in bringing about the conquest of this disease and they may well be proud of their achievements in practically ridding California of a preventable disease that occurred commonly twenty-five years ago. In the annals of the state's health history, no record is more outstanding than that of typhoid fever control.

### DIPHTHERIA

The record in diphtheria control is almost as outstanding as that of typhoid fever control. In 1920 the state's diphtheria case rate was 164.1 per 100,000 population and the death rate was 12.8. In 1938 the diphtheria case rate was 24.3 and the death rate was 1.4. The decreases in the incidence and mortality from this disease have been steady throughout almost two decades, and the results achieved have come through the use of immunization procedures and extension of activities in public health education. More difficulties are encountered, naturally, in the control of a disease that is dependent upon the application of preventive measures upon the individual rather than upon the environment. Typhoid fever has been controlled largely through the correction of environmental conditions while diphtheria has been controlled through education and the application of immunization upon individuals.

In spite of the difficulties encountered, local health officers have been able to apply preventive measures, in their respective territories. The death rate of 1.4 per hundred thousand for this disease in 1938 indicates the efficiency of the program for the control of this disease and the thoroughness with which it is conducted. It was not so many years ago that diphtheria was the greatest scourge of childhood.

### INFANT MORTALITY

Since 1920 the California infant mortality rate has been almost cut in half. In 1920 the rate was 75.0 per 1,000 live births and in 1938 the rate was 43.8. The Bureau of Child Hygiene of the California State Department of Public Health has been active in stimulating the adoption of routine procedures throughout California that would provide safeguards against needless deaths of infants. In some communities of the state, where social and racial conditions are particularly favorable, infant mortality rates have been achieved that compare favorably with those of any communities throughout the world. The large Mexican population of California, however, precludes the possibility of reducing the state's infant mortality rate greatly.

Bad sanitary and social conditions, as well as congenital disease, makes the achievement of successful campaigns in the reduction of Mexican infant mortality extremely difficult. Approximately 15 per cent of all births in California are among Mexicans and approximately one-third of infant deaths that occur in California are in Mexican babies. In the 1938 tabulation, excluding the Mexican infant deaths, the rate of infant mortality for all races in California was a little more than 30 per 1,000 live births. In consideration of the fact that, for biological reasons, a certain proportion of infant deaths cannot be prevented, it would seem that the state infant mortality rate is fast approaching a point of stabilization, if not an irreducible minimum. Stimulated by

Social Security funds, activities in local communities for the health protection of mothers and children have increased greatly during the past year. It must be remembered, however, that the infant mortality rate, to a large extent, is affected by conditions that are not under human control and that the annual general trend of the rate is similar throughout most of the country. The activities that are directed toward the saving of infant lives are productive of results, however, in spite of the fact that congenital defects play an important part in the production of high infant mortality rates.

#### SMALLPOX

In 1936 there were but 2.2 cases of smallpox per 100,000 population reported in California, while in 1920 there were 127.0 cases per 100,000 population. Since the method of prevention in the control of this disease is well known and has been practiced for decades, it is clear that the control of the disease depends entirely upon the thoroughness with which vaccination is applied.

In those communities where 50 per cent of the population is vaccinated against smallpox, the disease never becomes epidemic. The remarkable reductions in the prevalence of smallpox throughout California indicate the thoroughness with which public health measures are enforced by the health officers of California. In those counties where full-time health service is established, the general population has been offered vaccination freely.

In 1937 and 1938 the smallpox case rate has risen to 10.7 and 19.0 per 100,000 population, respectively. These increases are not due to any laxity upon the part of public health authorities in California but rather to the importation of cases into the state by migratory agricultural laborers and spread of the disease in local communities. Contacts with cases in the families of migrants have contracted the disease and the increased prevalence is due to this fact. Although many cases have been brought into the state during the past few years, the State Department of Health, assisted by local health officers, has kept smallpox under control and no serious outbreaks have occurred among migratory agricultural laborers or contacts with cases in migrants. Had the resident population of California not been vaccinated against smallpox, it is certain that through contact with these itinerant cases widespread epidemics of this disease might have occurred.

California's record in the control of typhoid, smallpox, tuberculosis, diphtheria and infant mortality is outstanding and compares favorably with similar results that have been achieved in states that have made far greater expenditures in the protection of their public health. The achievement of these records has been dependent upon the efficiency of organizations and individual workers rather than upon the expenditures of vast sums of money.

The California State Department of Public Health takes justifiable pride in the activities of local health officers, public health nurses, and members of its own staff in the prevention of the diseases and savings in human lives that have come about through these coordinated activities.

#### CALIFORNIA RATES

	Typhoid		Smallpox		T. B.		Diphtheria		Infant
	Case	Death	Case	Death	Case	Death	Case	Death	Mortality
1920....	32.8	4.9	127.0	250.0	152.6	164.6	12.8		75.0
1930....	13.0	1.7	54.8	197.0	98.2	53.6	3.4		58.6
1935....	8.5	1.2	4.9	131.3	72.0	33.7	2.1		49.5
1936....	9.3	1.1	2.2	125.9	72.2	31.4	2.0		53.0
1937....	7.7	0.87	10.7	124.3	67.8	23.5	1.6		53.7
1938....	7.1	0.83	19.0	115.2	60.5	24.3	1.4		43.8

#### WAGNER NATIONAL HEALTH BILL: AN IMPRESSIVE MEASURE\*

The Medical Society of the State of New York evidently does not think any too highly of Senator Wagner or of his so-called National Health Bill. Its *Journal of Medicine*

\* Concerning Wagner Bill, see page 368.

says that, "with all due respect to the senior Senator from New York," it would characterize the bill as extremely amateurish, "did we not suspect that this veteran political strategist has purposely drawn it so vaguely that its passage through Congress would encounter the least amount of oppositional friction in its passage toward enactment." In addition to that, the publication thus speaks of the bill:

It is wholly impractical, it is almost unworkable, it is certainly extremely vague, and absolutely unsuitable from our standpoint. If enacted into law, it will bring the medical profession into such difficulties that it will take decades to extricate ourselves from them. Particularly will it be difficult to evade the bureaucratic interpretations which must be made, perforce, because the bill is full of uncertain terms, and contains too many unprecedented tentative permissive clauses.

The journal's chief complaint against the measure is that the bill does not even meet the major proposals of the National Health Conference; that it makes no provision for the establishment of adequate medical standards; that it gives too much authority to state health officers; that it places the control of medical practice under the supervision of lay heads of political bureaus; that although there is "some vaguely outlined provision calling for the development and education of medical career officials," this may mean the "experimental set-up of an educational system" which ultimately will lead to "straight state medicine." It suggests that in any scheme for the coordination of local community needs care should be taken to keep it out of the hands of a "purely political group" that will never lose sight of the effect its decisions may have upon voters.

Whatever else may be said about the stand thus taken, the *Journal of Medicine* is certainly on firm ground when it argues that legislation of such importance should be precise in its terms. Imprecision in terms is, however, the hot-bed in which bureaucracy most flourishes. No better evidence of that can be found than in the story of another piece of legislation associated with Senator Wagner's name—the National Labor Relations Act.—*New York Sun*, April 4.

#### WAGNER HEALTH MEASURE CALLED HUGE POLITICAL BRIBE

New York, March 31 (AP).—Frank Gannett, Rochester, New York, publisher and chairman of the National Committee to Uphold Constitutional Government, today said the proposed Wagner national health bill was "in effect a huge bribe to install politically controlled medical service."

Gannett said the act, introduced in Congress recently by Senator Robert F. Wagner (D.), New York, would "have even more damaging results than his (Wagner's) NRA and National Labor Relations Act which have promoted strife in industry and delayed recovery."

The publisher said in a statement that the measure would "put the Federal Government far into the field of medical care from which it will never retreat."

#### DISEASE OF POLITICS

"Using federal and state funds," he said, "it will set up government hospitals and a vast system of tax-supported medical care that may, in the end, undermine and drive out of existence all private and church hospitals and the private practice of medicine."

"So humanitarian and praiseworthy are the objectives (of the act) that one must be brutally frank to point out that the diagnosis behind them is careless and inaccurate, that the prescription is wasteful and unscientific, and that the 'cure,' instead of achieving the desired result, would infect the practice of medicine with an almost fatal disease. That disease is politics."

#### SEEN AS HUGE BRIBE

"On the face of it, the Wagner Bill does not provide for compulsory health insurance. With almost insidious deft-

ness it leaves such a matter to discretion of the states. They must decide whether to adopt insurance or set up a system of tax-supported state medicine; and if they fail to adopt a plan acceptable to the Federal Government, they must do without liberal tax money allotments from the Federal Government.

"Thus in effect, the Wagner Bill is a huge bribe to install politically controlled medical service."—*Los Angeles Times*, April 1, 1939.

### UNITED STATES DEBT FORTY BILLIONS AS "CEILING" NEAR

Washington, April 1 (AP).—The treasury's debt passed the 40,000 million dollars mark today, coming within 5,000 million dollars of the statutory limit.

Although the administration has considered increasing the legal debt ceiling to 50,000 million dollars, it has decided against asking Congress to make the change this year.

The debt, largest in the nation's history, now is equivalent to approximately \$305 per person. A year ago, the \$37,556,302,000 debt equaled \$289.17 per capita.

Other milestones were the prewar low of \$1,282,044,346, equal to \$12.36; the high of World War financing, \$25,478,592,113, equal to \$250.18; the postwar low of \$16,026,087,087, equal to \$129.66, and the pre-Roosevelt point of \$20,937,350,964 on March 3, 1933.

The debt has increased 2,850 million dollars in the last year alone.

Today's debt is a few millions over 40,000 million dollars because of the customary first-of-the-month borrowing of 50 million dollars from the old age reserve fund. The exact figure for today will not be available for a few days, however.

The treasury debt does not include the 5,400 million dollar obligations of governmental corporations which are guaranteed by the treasury but are excluded from the treasury indebtedness because of the assumption that the corporations will repay them. The guaranteed debts include: Home Owners Loan Corporation, 2,900 millions; Reconstruction Finance Corporation, 810 millions; Federal Farm Mortgage Corporation, 1,385 millions; Commodity Credit Corporation, 205 millions, and United States Housing Authority, 100 millions.

### AVERAGE U. S. INCOME TOLD

#### Earnings of Typical American Family in 1938 Put at \$2,116

New York, April 9 (AP).—The average effective buying income of the average American family in 1938 was \$2,116, the magazine *Sales Management* said today in its tenth annual survey of buying power.

The average individual American had approximately \$492 to spend last year, it added.

#### DECLINE ESTIMATED

The nation's estimated total income for 1938, at \$63,274,609,000, was about 12 per cent less than in 1937, but half again above the acute 1932 depression low of \$41,000,000,000, the publication said.

New York was first among states with a family average of \$3,069; Nevada was second with \$2,777, and California third with \$2,733. Other leading states were Massachusetts \$2,673, Rhode Island \$2,601, New Jersey \$2,587, Wyoming \$2,584, Connecticut \$2,560, Minnesota \$2,440, Delaware \$2,369, Maryland \$2,362, and Washington \$2,339.

#### DES MOINES LEADS

Of major cities, Des Moines was first with a per-family effective spending income of \$3,778, followed by Washington, D. C., \$3,767, Minneapolis \$3,700, New York City \$3,609 and Dallas \$3,584. Ten next principal cities of the first 15, in order, were Houston, Davenport, St. Paul, St.

Louis, Ft. Worth, Kansas City, Miami, Tulsa, San Francisco and Boston.

Thirty major cities in all exceeded the \$3,000 mark for per family effective spending incomes.

#### SIGNIFICANT TO SOUTH

The average white family in the United States last year had \$2,252, which was only \$136 above the all-family average for the country, a fact of especial interest in southern states, the magazine reported.

In South Carolina, for example, where the average effective buying power of all families was estimated at \$1,176, the average buying power of the white family stands at \$1,590.

### MORTALITY RATE AT ALL-TIME LOW

Observing the thirtieth anniversary of its health program started in 1909 for the benefit of millions of industrial policyholders, the Metropolitan Life today released figures to show some of the results accomplished during those three decades. The following are the highlights of the report:

Death rate among the policyholders dropped from 12.5 per 1,000 in 1911 to 7.7 per 1,000 in 1938, the lowest in their history.

The average length of life of the policyholders is fourteen years longer than it was thirty years ago, having advanced from 47 years to about 61 years.

Some phenomenal reductions in mortality from individual diseases that took place during this period are indicated by declines in their death rates per 100,000 policyholders.

Tuberculosis, from 224.6 to 46.9; influenza and pneumonia, from 131.1 to 58; typhoid fever, from 22.8 to .9; Bright's disease, from 95 to 53.2; accidents, from 77.4 to 48.3.—*San Francisco Call-Bulletin*, April 13.

### SOCIAL SECURITY SURVEY REVEALS AVERAGE WAGE

Washington, April 9 (Exclusive).—Analysis of earnings made public today by the Social Security Board disclosed the average American wage for workers coming under the board's old-age security act as \$890 annually. John J. Corson, director of old-age insurance, pointed out that wages in excess of \$3,000 a year from one employer were not counted under the tabulation.

In a breakdown by states, California with \$912, has the twelfth highest average wages per employee of any state.

#### CALIFORNIA STATISTICS

In California \$1,860,464 employees covered by the act received \$1,695,163,619 in reportable wages during 1937, the report showed.

The analysis showed that employees receiving less than \$3,000 a year constitute 97 per cent of the total number of American earners covered in the survey and their earnings about 90 per cent of the total volume of wages.

Younger workers were found to be more numerous than those in the older-age groups, but the average wage earned by older workers was higher.

#### ELDER EARN MORE

"Fully 60 per cent of the 30,150,000 employees were between the ages of 20 and 40," the report stated. "Those between the ages of 40 and 60 amounted to only 20 per cent of the total, or less than half the younger group. But the average wage of the older group was \$1,185, more than a third greater than the average wage of \$860 received by the younger workers."

The average taxable wage of approximately 700,000 employees between the ages of 60 and 65 was \$1,086, or almost double the average for some 5,700,000 employees between the ages of 20 and 25, the study showed. The age

group showing the highest average wage—\$1,204—was that from 45 to 50 years of age—constituting 8 per cent of the total number of employees studied.—*Los Angeles Times*, April 10.

### CANCER CONTROL MONTH

With this as its slogan and in accordance with President Roosevelt's proclamation designating April as "Cancer Control Month" more than 600 women this week will take the field under the direction of Mrs. William H. Daniel, Southern California Commander for the Women's Field Army Division of the American Society for the Control of Cancer. The object of the drive will be to teach men and women that cancer is curable in its early stages and to urge preventive measures to reduce the annual cancer mortality of 150,000 in the United States.

More than 100 nurses under the supervision of Mrs. Cullen Ward Irish, lieutenant commander of the Women's Field Army, will be stationed in the drug stores throughout the southland to better acquaint the public with the early symptoms of cancer.

Members of the Women's Field Army led by Mrs. Daniel, through local committees and speakers will stress the fact that 70,000 people might have been saved from death by cancer last year if they had heeded certain early signs of cancer and had early treatment. These early cancer signs are enumerated as: any persistent lump or thickening especially in the breast; any irregular bleeding or discharge from any body openings; any sore that does not heal, particularly about the tongue, mouth or lips; persistent indigestion often accompanied by loss of weight; sudden changes in the form or rate of growth of a mole or wart.

As a part of the campaign to check the spread of cancer and to create a fund with which to fight the disease donations will be asked of the public. Seventy per cent of all monies received will be spent in the state wherein it was raised under the approval of the American Society of the Control of Cancer.

Members of the Southern California executive committee are Clarence G. Toland, past president of the State Medical Association, chairman; and C. R. Robinson, vice-president of the Bank of America, as treasurer; Dr. Hiram C. Weaver, director of the American Society for the Control of Cancer; Dr. William H. Daniel, president of the Los Angeles County Medical Association; Dr. E. Eric Larson, president of the Los Angeles Surgery Society; Dr. Alvin G. Foord, chief of Pathology at the Huntington Memorial Hospital in Pasadena; Dr. Henry J. Ullmann, chief of Radiology Department and Cancer Research, Cottage Hospital, Santa Barbara; Dr. Albert C. Sellery, former chief of staff at the Seaside Hospital, Long Beach; Dr. Orville N. Meland, and Dr. Hall G. Holder of San Diego.—*Victorville News-Herald*, April 7.

### PREFERRED PROOFS OF AGE

There has never before been such a demand for proof of age as at the present time. The Veterans' Administration, Social Security Board, Railroad Retirement Board, Civil Service Commission and Department of State, all government agencies, have outlined their preferences in the types of evidence necessary to prove age in their respective departments. The United States Bureau of the Census, with the Social Security Board, has prepared a summary in three preference groups which is reproduced here for the benefit of the large numbers of individuals who demand this information from local registrars of vital statistics. It should be noted that in every department the certified copy of the birth record is given first preference. The birth certificate has become, without doubt, the most useful legal document of the average American citizen.

Demands for proof of age have shown a marked increase during the past few years, largely as a result of governmental requirements. This is especially true for the filing of claims for pensions and other benefits provided under social security legislation.

For proof of age, the most acceptable evidence is a certified copy of a birth certificate filed at the time of birth. A certificate placed on file at a later date, especially if filed at a time when there is a specific purpose for doing so, has comparatively little value as proof of the facts stated thereon. In such cases, other information must be presented. Original census records afford evidence acceptable to courts and other agencies but should be used only as a last resort.

The following summary divides the evidence of proof of age into three preference groups. Group 1, Types Given First Preference, includes only records made at the time of birth or very shortly thereafter. Group 2, Types Given Second Preference, includes records which are usually considered acceptable without corroboration, although evidence from two or more sources may be required if circumstances warrant. Group 3, Types Given Third Preference, includes records which usually require corroboration from two or more sources.

#### Department of State (Passport Regulation)

##### Types Given First Preference

Certified copy of public record of birth.  
Certified copy of church record of baptism, provided that these records were created within a short time after date of birth.

##### Types Given Second Preference

Affidavit of parent, physician, nurse, or midwife who attended birth.

##### Types Given Third Preference

Affidavit of a reputable person having sufficient knowledge to be able to testify as to the place and date of birth, incorporating briefly therein how and through what source the knowledge was acquired.

#### Social Security Board Bureau of Old-Age Insurance

##### Types Given First Preference

Certified copy of public record of birth, or certified statement of date shown on such public record.  
Certified copy of church record of infant baptism.  
Sworn statement of two other persons having knowledge thereof.

##### Types Given Second Preference

Bible or family records.  
Certified copies of excerpts from business, fraternal, school, governmental, or other similar records.  
Data supplied by government agencies, as authorized.  
Other documents (including insurance records and passports), or evidence deemed by board to be of probatory value acceptable to the board.

##### Types Given Third Preference

No type given.

#### Bureau of Public Assistance

##### Types Given First Preference

Accepted without investigation:  
Certified copy of public record of birth.  
Transcript of birth record.

##### Types Given Second Preference

Accepted without investigation, unless corroboration seems desirable:  
Baptismal and parish records.  
U. S. Census records.  
Marriage records of applicant or his children.  
Records of school, homestead, naturalization, voting registration, and court. Military records.  
Immigration papers.  
Passports. Poll tax exemption certificates.

##### Types Given Third Preference

Corroborated from two or more sources usually required:

Family register, town and county histories; records of hospital, midwife, employment, trade union, fraternal organization, tombstone, slave sale, and vaccination.  
Bible records; Who's Who.

Fishing, hunting, and drivers' licenses; legal papers; insurance policies.

#### Railroad Retirement Board

##### Types Given First Preference

Certified copy of public or church record of birth.  
Records of school, insurance, trade union, marriage, naturalization, vaccination, Bible, and family. Passports.  
Employers' records.  
Fraternal records.  
Military records.  
Immigration papers.

##### Types Given Second Preference

###### Last resort items:

Drivers' permits.  
Voting registration records.  
Game licenses.  
Newspaper and magazine clippings.  
Poll tax exemption certificates.  
Affidavits.  
Other documents considered equally or more reliable.

##### Types Given Third Preference

No type given.

#### Civil Service Commission

##### Types Given First Preference

Certified copy of public record of birth.  
Certified copy of baptismal or other church record.  
(Above records must be based on information filed at time of birth or shortly thereafter.)

##### Types Given Second Preference

Original or certified copy of family record was made at time of birth or shortly thereafter. This must be accompanied by affidavit of Notary Public.  
Statement from attending physician based upon his professional record.

U. S. Census records showing earliest available record of age.

##### Types Given Third Preference

School records.  
Naturalization papers.  
Immigration records.  
Passports.  
Insurance policies.  
Affidavits of parents, relatives, or other persons.  
Other documents.  
(Two or more of above forms of evidence are desirable.)

#### Veterans Administration

##### Types Given First Preference

Certified copy of public record of birth.  
Certified copy of church record of baptism.

##### Types Given Second Preference

Affidavit of attending physician.  
Affidavit of midwife in attendance at birth.  
Affidavits of two or more persons (preferably disinterested).

##### Types Given Third Preference

Bible or other family record of birth, certified as to date when made.  
U. S. Census records.

*American Medical Association Annual Reports Published.*—According to the By-Laws of the American Medical Association, all reports of officers must be published one month in advance of the annual meeting. In *The Journal of the American Medical Association* for April 8 are published these reports. They give in retrospect the outstanding activities of the Association for the past year. The following is a list of some of the accomplishments named in these reports:

In 1934 there were 98,041 members and 60,714 Fellows. In 1938 these totals had grown to 109,435 and 68,478 respectively and on March 1, 1939, the official membership totaled 112,210 physicians and 69,468 Fellows.

Commenting on these figures in his report, Olin West, M. D., Secretary of the Association, says: "The figures here presented would seem to refute definitely statements emanating from various sources during these five years designed to indicate that there has been great disaffection in the ranks of the physicians of the United States and great diminution in the support of the profession generally for the established policies of the American Medical Association."

Total income in 1938 was larger than in 1937, but the increase in total expenditures was considerably larger than the increase in income, the Board of Trustees reports. Total expenditures were larger than income by the sum of \$11,401.51.

The Fifteenth Edition of the American Medical Directory contains the names of 188,916 physicians of the United States and Canada. More than 13,000 new names appeared in this edition, while approximately 8,000 names which appeared in the Fourteenth Edition were dropped because of deaths.

A review of activities of the Council on Foods during 1938 emphasizes again the continued coöperation of members of the food industry. Few products have been accepted without requiring changes in nutritional claims on labels or in advertising and very few products have been rejected because producers were unwilling or unable to meet the requirements. In a study of the comparative value of the vitamin C potency of canned fruit juices it was found that accepted products compare favorably with fresh juices and rate as excellent sources of the antiscorbutic factor. The Council has prepared brief accounts of the principles which underlie the selection of an adequate diet, one such report having been published in the A. M. A. Internists' Manual. In coöperation with the Council on Pharmacy and Chemistry there was published in *The Journal* a series of noteworthy articles on the vitamins prepared by prominent investigators in the field.

Briefly, the important work of the Council on Physical Therapy for 1938 has been directed toward the consideration of radium and radon seeds, artificial limbs, audiometers, hearing aids, x-ray apparatus and the study of radio interference caused by electromedical equipment.

The interference of radio communications by electromedical equipment was one of the important subjects coming before the Council. A joint meeting was held at which members of the medical profession, representatives of the manufacturers of electromedical equipment, of radio manufacturers and of other interested bodies, and officials of the Federal Communications Commission were present.

The Advisory Committee on Advertising of Cosmetics and Soaps has continued to pass on preparations on which its advice has been requested. There is no doubt that a decided change has been noted in the advertising of many of the cosmetic firms, owing in large measure to the advent of the new Food, Drug and Cosmetic Act but in small measure also to the activities of this committee. The committee has been called on for advice from many sources. Although the committee has not published any articles over its name, it is pleased to report that many of the firms with which it has dealt have revised their literature completely and effectively.

The Bureau of Health Education during the year handled 5,474 communications from doctors, medical societies and coöperating agencies, 8,220 inquiries from the lay public and 1,145 pieces of radio audience mail. It broadcast thirty-seven dramatized radio programs in coöperation with the National Broadcasting Company. The radio library furnished scripts to 128 county medical societies and twenty-one state medical associations, distributing a total of 5,540 scripts covering 876 titles.

The Bureau of Medical Economics reports that medical societies in forty-five states and Washington, D. C., are participating in the study of medical care conducted by the American Medical Association under the direction of the Bureau. Already 416 county medical societies in thirty-six states with the coöperation of other agencies and organizations have completed a study of the need and supply of medical care in their communities. . . .

The Committee on Therapeutic Research, a standing committee of the Council on Pharmacy and Chemistry, which encourages scientific investigations in the field of therapeutics or treatment by providing funds for the prosecution of necessary research, reports that during 1938 it issued thirty-seven new grants.

## TWENTY-FIVE YEARS AGO†

### EXCERPTS FROM OUR STATE MEDICAL JOURNAL

Vol. XII, No. 5, May, 1914

From Some Editorial Notes:

*The Santa Barbara Meeting.*—The annual meeting of the State Society, held last month at Santa Barbara, was a distinctly successful one, and the attendance was rather larger than is usual for Santa Barbara meetings. . . .

The plan presented by the Council for handling the insurance situation (industrial accident), was adopted without the slightest change and, together with the fee bill which was endorsed, will be found on pages 196a, 196b, 196c.

*Ideals.*— . . . It is a commonplace observation that the men who are today being graduated from our medical schools come forth far better equipped for the practice of their art than were those mustered into its ranks some years ago. Thus premised, is it not to be deplored that the average medical practitioner is not a man of general culture, as we would have all members of a learned profession be? The world and its work was never better worth preparing for than now, for in science especially a new renaissance is arriving; the mysteries of natural law and human potency are being rapidly unveiled. The knighthood of the "Quest of Life" enrolls in the order of psychic and mechanical investigation and presses on to new accomplishment. Though neither wins the "Grail," each wins nearer to its laws. . . .

Education is to enjoy the best and know the best, as well as to produce the best. The degree of a learned profession should be something better than a meal check. It has been said, with some truth, that the allurements of Mammon are too often permitted to call our ingenuous youth from the proper business of school and college. Short roads tempt them to abandon the broad work of education and to go prematurely to schools of professional and technical instruction. The consequence is, the sending forth of half-educated men to plead the causes, to heal the diseases, and to lead the thinking of this generation.—J. Dennis Arnold.

*The Fee (Industrial Insurance) Schedule.*—In looking over and thinking about the fee schedule agreed upon and recommended by the Council of the State Society, there are a number of points to be taken into consideration:

It is not a schedule of flat fees for all cases.

It is a list of minimum fees appropriate for workmen earning not over \$1,000 a year.

It does not cover everything; special cases need special consideration.

It is not put out as a contract to flat fees for which physicians must treat everybody injured.

The total amount received by our members per year will be very much more than what they get now.

Any member of the Society may be called in, if he wishes to do the work.

Any member has a chance to keep his patient and treat the injured one, if he wishes to do so, other things being equal.

It is especially understood and provided that unusual work shall receive adequate compensation.

It is essential that all bills be itemized and not "padded." Dressings used should be entered on the bill and a reasonable charge made for them.

All contracts to furnish medical services at wholesale are abolished.

(Continued in Front Advertising Section, Page 15)

† This column strives to mirror the work and aims of colleagues who bore the brunt of Association activities some twenty-five years ago. It is hoped that such presentation will be of interest to both old and new members.

## BOARD OF MEDICAL EXAMINERS OF THE STATE OF CALIFORNIA†

By CHARLES B. PINKHAM, M.D.  
Secretary-Treasurer

### News

"Governor Culbert L. Olson has announced the reappointment of Dr. Frederick R. DeLappe of Modesto, Stanislaus County, as a member of the State Board of Medical Examiners. Other appointments include: Dr. Franklin Morris of Oakland as a member of the State Board of Chiropractic to succeed Dr. Roy Labouchotte of Redwood City, San Mateo County; Dr. Charles E. Hobrecht, San Francisco, to the State Board of Optometry, succeeding Dr. Geoffrey Davis of Sacramento; Dr. L. E. Pike of Long Beach to the State Board of Examiners in Veterinarian Medicine, succeeding L. G. Clark, and Mrs. Tillie Klob of Los Angeles to the State Board of Cosmetology, succeeding Mable C. Manzell." (Sacramento Bee, April 6, 1939.)

"Of 1,063 foreign physicians who took the state medical examinations in New York during 1937 and 1938, 622 were successful. The largest number of candidates (422) came from Germany, of whom 210 failed to pass. Austria furnished 112, of whom 35 failed. Of 488 graduates of New York medical schools, 5.5 per cent failed and of 285 from schools of other states, 24.9 per cent failed." (Federation Bulletin, March, 1939.)

"Dr. John R. Brinkley, who made a fortune from old men seeking the vitality of youth, was denied damages today by a federal jury which decided he was not libeled in Dr. Morris Fishbein's article challenging his abilities as a surgeon. He had asked \$250,000 for 'the shame, humiliation and embarrassment' which he charged Fishbein's article caused. The verdict was for the defendant, and Brinkley, from his Little Rock, Arkansas, hospital, said his lawyers will file an appeal immediately. Fishbein's defense was that he wrote the article, published in the American Medical Association magazine, *Hygeia*, as a warning to the public. From the witness stand he reiterated every statement incorporated in it, declared each is 'based on fact.' Brinkley introduced a number of former patients, principally old men, who said he had aided them in their search for sexual revitalization. Brinkley, himself, testified that, while goat gland operations proved successful in the restoration of human vitality, he had long since discarded the technique in favor of 'better' methods." (Sacramento Bee, March 30, 1939.) (Previous entries, July, October, 1930; September, 1931; April, 1934; May, 1936.)

"After sixty days of figuring, the municipal employees Health Service System yesterday worked out a balance sheet for its January operation and revealed that doctors received \$22,873.69 for service valued at twice that sum, even under the low rates set by the Health Service System. In announcing the 50 per cent reduction, system officials were 'so sorry.' They even expressed the hope that the deficiency might be made up 'some time in the future.' They based their admittedly slim hope on the possibility that the amount of illness among municipal employees would drop greatly during the summer months and thus permit the system to build up a surplus. Meanwhile, the medical director's office was attempting to determine whether a slash of doctors' fees for February service would be necessary. No estimates were available. With hospital and clinical fees totaling \$8,923 paid 100 cents on the dollar, the doctors were

(Continued in Front Advertising Section, Page 34)

† The office addresses of the California State Board of Medical Examiners are printed in the roster on advertising page 6.